OCCUPATIONAL STRESS, PSYCHOLOGICAL CAPITAL AND JOB SATISFACTION AMONG PUBLIC AND PRIVATE SCHOOL TEACHERS WITHIN ONE REGION IN KWAZULU-NATAL

By

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<u>Declaration</u>

I declare that this short dissertation prepared for the partial fulfilment of obtaining the qualification of Masters of Social Science (Industrial Psychology) at the University of KwaZulu-Natal is my own work. This dissertation has been submitted for the degree of Masters of Social Science in the Faculty of Applied Human Sciences, University of KwaZulu-Natal. None of the present work has been submitted previously for any degree or examination in any other university, and all sources that I have used have been acknowledged.

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Dedication

I would firstly like to thank God for helping me get through this dissertation and for giving me wisdom, knowledge and strength to cope with the challenges I faced. I would like to dedicate this dissertation to my family (Dad, Mum, Tash, Christelle and Joshua) for their continuous support and love throughout this challenging year, especially my parents for their financial support and guidance. I would also like to dedicate it to my fiancé Marcus for always supporting me and encouraging me to continue even when I felt like giving up. I am truly blessed to have such amazing people in my life and without you all, I would not have been able to complete my dissertation.

Acknowledgements

Abstract

Orientation: A large amount of research conducted internationally has revealed that most teachers regard teaching as rewarding, however at the same time many teachers reported a high level of stress as well as the experience of symptoms of burnout (Stoeber & Rennert, 2008; Williams & Gersch, 2004; van Zyl & Pietersen, 1999). Emotional exhaustion among teachers has been linked to an excessive workload, thus resulting in teachers leaving the profession. This is problematic as emotional exhaustion is not healthy and teachers need to find a way to manage the stress they encounter on a daily basis (Skaalvik & Skaalvik, 2011). The development of psychological capital (PsyCap), has been found to have an impact on occupational stress and job satisfaction (Luthans & Avolio, 2003). Numerous studies have proven that individuals with greater PsyCap have a more positive perspective on life (Luthans & Avolio, 2003; Luthans, Youssef & Avolio, 2007). Individuals who have greater PsyCap are physically healthy and have stronger immune systems; furthermore they live longer (Luthans, Youssef & Avolio, 2007). Therefore the development of teachers' PsyCap is essential in order to reduce occupational stress and to increase job satisfaction.

Research Aim: The aim of the study was to investigate the relationship between occupational stress, PsyCap and job satisfaction among public and private school teachers in one district within KwaZulu-Natal in South Africa. Further, to look at the differences between PsyCap, job satisfaction and occupational stress between private and public school teachers. Finally to determine the best predictors of job satisfaction.

Motivation for the Study: This study aimed to identify the nature of the relationship between occupational stress, PsyCapand job satisfaction among public and private school teachers in one district within KwaZulu-Natal in South Africa. The study also aimed to identify the differences between PsyCap, job satisfaction and occupational stress between private and public school teachers. The study then aimed at identifying whether PsyCap is the best predictor of job satisfaction.

Research Design, Approach and Method: A cross-sectional survey design was used to answer the research questions. A non-probability sampling, specifically convenience sampling, was used in the schools within one region in KwaZulu-Natal in South Africa. A sample of 100 teachers participated in the research. The measuring instruments administered were the Psychological Capital Questionnaire (PCQ), the Minnesota Satisfaction Questionnaire (MSQ), the Occupational Stress Inventory (OSI-r) and a biographical questionnaire.

Main Findings: Consistent with previous research statistically significant positive relationships as well as practically significant relationships were found between PsyCap and job satisfaction, furthermore there was a statistically significant negative relationship between PsyCap and occupational stress. This indicates that higher levels of PsyCap are associated with higher levels of job satisfaction, furthermore higher levels of PsyCap are associated with lower levels of occupational stress. This empirically confirmed the discriminant and convergent validity of the dimensions in a South African context. The sub-construct of hope within PsyCap was a strong predictor of both intrinsic and extrinsic job satisfaction. In addition to this, total PsyCap was a good predictor of total job satisfaction.

Practical/Managerial Implications: PsyCap plays an important role in positive organisational outcomes such as job satisfaction and low levels of occupational stress. The Department of Education within the public sector needs to develop as well as implement interventions within schools that would result in the increase of PsyCap of teachers within private and public schools. In addition to this PsyCap can be used for selection and retention strategies. This would be valuable to identify psychological strengths of teachers and then harness this in order to increase job satisfaction as well as cope with occupational stress.

Contribution/Value-Add: This study contributes to the positive psychology literature on PsyCap, job satisfaction and occupational stress regarding teachers within the South African context. Furthermore this study highlighted the important of PsyCap in predicting job satisfaction. This study also gave recommendations for interventions for teachers within private and public schools.

Key Words: Psychological Capital (PsyCap), job satisfaction, occupational stress, private and public schools, teachers, KwaZulu-Natal, South Africa.

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CHAPTER 1

INTRODUCTION

1.1   Introduction to the study

This chapter firstly includes a brief introduction to what the study entailed, taking into consideration the relationships between the variables explored which are psychological capital, occupational stress, as well as job satisfaction among private and public teachers. Thereafter it leads to a discussion of the research objectives of the present study as well as the research questions the study sought to answer. The methodology of the research is then outlined as well as a description of the measuring instruments which were utilised within the study. The procedures which were adopted are outlined below. Finally chapter one concludes with an outline of the study and a summary.

1.2   Problem Statement

A large amount of research conducted internationally has revealed that most teachers regard teaching as rewarding, however at the same time many teachers reported a high level of stress as well as the experience of symptoms of burnout (Stoeber & Rennert, 2008; Williams & Gersch, 2004; van Zyl & Pietersen 1999). Emotional exhaustion among teachers has been linked to an excessive workload thus resulting in teachers leaving the profession. This is problematic as emotional exhaustion is not healthy and teachers need to find a way to manage the stress they encounter on a daily basis (Skaalvik & Skaalvik, 2011).

The majority of the research conducted on teachers' occupational stress, psychological capital and job satisfaction has been done internationally. There is limited research done within South Africa on these three variables together, however separately there has been a fairly large amount of research conducted (Mji & Makgato, 2006). Therefore this study aims to contribute to the existing research on teachers, however it also aims to fill the gap that exists as there is no research study within the South African context that looks at occupational stress, psychological capital and job satisfaction at the same time in relation to teachers.

According to the available research there is a great need to address the occupational stress and low job satisfaction faced by many teachers within the South African context (Skaalvik & Skaalvik, 2014; Naidoo et al., 2013), therefore this study suggests developing teachers' psychological capital which is made up of hope, self-efficacy, resilience and optimism as a buffer against stress and as a positive resource which will then motivate teachers and ultimately result in a higher level of job satisfaction. This study contributes to the available research within positive psychology, furthermore it recommends using the research to enhance the development of teachers.

1.3   Objectives of the Research

The main objective in conjunction with the specific objectives, make up the aim of the study. The objectives of the study are the following:

1.3.1 The Main Objective

- The main objective of the study is to investigate the relationship between occupational stress, psychological capital and job satisfaction among public and private school teachers in one region within KwaZulu-Natal in South Africa.

1.3.2 Specific Objectives

- To explore the psychometric properties of the data collected.

- To investigate the relationship of psychological capital occupational stress and job satisfaction.

- To compare the levels of occupational stress, job satisfaction and psychological capital among public school teachers and private school teachers.

- To investigate the best predictors of job satisfaction (extrinsic and intrinsic).

- To investigate the role of gender on psychological capital.

1.4   Research Questions

The research questions for this study are the following:

- What are the psychometric properties of the data that was collected?

- What is the relationship between psychological capital, occupational stress and job satisfaction?

- Is there a difference in the levels of occupational stress, job satisfaction and psychological capital among private and public school teachers?

- What are the best predictors of job satisfaction (this will include intrinsic as well as extrinsic job satisfaction)?

- What is the role of gender on psychological capital?

1.5   Study Overview

The first chapter is introductory as it provides the problem statement, the objectives of the present study, the research questions and an overview of the following chapters. The second chapter contains a literature review which provides a detailed discussion on the constructs within the study. Thereafter it provides a discussion on the theoretical framework utilised within the study which is based on the constructs of the study. Furthermore the literature review also provides a critical discussion on previous studies conducted and the relationships that were found between the constructs. The third chapter focuses on the research design, the method of sampling, measuring instruments which were used as well as the statistical analysis which was carried out within the study. The fourth chapter contains the results of the study. The fifth chapter provides a discussion of the results of the study. Finally, the sixth chapter concludes with limitations of the study as well as recommendation for future research studies.

1.6   Chapter Summary

This chapter provided a discussion of the problem statement, the objectives of the present study as well as the research questions. This was then followed by a study overview, which outlined the discussion which will unfold in the following chapters of the research study.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction

The literature review commences with a discussion on teachers within the South African context in order to further understand the problem statement as well as develop a case to point out the need for research within this area. Then there is a discussion on positive psychology in order to understand the emergence of psychological capital. It then delves into psychological capital as a higher order construct leading to a discussion of the sub-constructs of hope, self-efficacy, resilience and optimism. Thereafter it discusses occupational stress as well as job satisfaction and the relationship that exists between them and psychological capital. Finally a discussion follows on the theories used within this study which form the theoretical framework of the study. The first theory discussed is the theory of self-determination which was developed by Deci and Ryan (2008), thereafter the theory of psychological stress which was developed by Lazarus (1991) is discussed.

2.2   Teachers within the South African Context

In South Africa the teaching profession is decreasing in popularity as well as constantly transforming due to the amount of dissatisfaction teachers are experiencing (Naidoo et al., 2013). There are a number of factors which contribute to teachers' dissatisfaction and occupational stress; the factors which have been identified by researchers are a lack of opportunities to grow, work overload, job insecurity as well as a lack of control (Mji &

Makgato, 2006; Naidoo et al., 2013). In another study which was conducted within the South African context by Peltzer et al. (2009, p.254) "revealed that hypertension, stomach ulcers as well as other stress-related diseases were some of the negative effects of teacher dissatisfaction". Within that study, a correlation was made between the ill health effects and moreover elevated levels of attrition as well as absenteeism among teachers. Teachers also experience pressure when learners don't perform; this is especially true within private schools as parents assume that it is the teachers' responsibility for their children to perform well. Recent transformations in the education sector include a change to an outcomes-based education (OBE) curriculum (Bhana, Morrell, Epstein & Moletsane, 2006). There are also new rules as well as policies which are constantly being enforced, however when they are developed they don't consult with teachers even though it affects them (Bhana et al., 2006). "The new policies as well as procedures require different structures of governing bodies for schools and ways of dealing with discipline. Among other things, corporal punishment has been abolished and alternative ways of dealing with disciplinary problems have had to be developed; this has affected the way in which teachers deal with children who lack discipline" (Bhana et al., 2006, p. 8). In addition, inclusive education has been introduced which is a requirement that is mandatory for all teachers to deal with children within their specific classrooms who have learning difficulties. Thus teaching within the South African context is a tough job for teachers. Therefore, this study aims to understand the level of occupational stress and job satisfaction experienced by teachers and thereafter looks at their levels of psychological capital and then develops an intervention based on the results of the study.

2.3   Positive Psychology

Traditionally psychology focused on helping people, however it was based on the premise of seeking to find what was wrong with someone in order to help them rectify it (Sheldon & King, 2001). Thus psychology had a negative connotation in the sense that if someone sought psychological help, it was assumed that there was something wrong with them. Therefore several years ago modern psychology came about and sought to enhance the strengths of an individual. This movement was started by Martin Seligman, who was at that time the president of the American Psychological Association; furthermore he was recognised for the research he conducted (Seligman, 1998). He began the positive psychology movement using scientific methods to study strengths which allowed individuals, organisations and groups to thrive (Seligman & Csikszentmihalyi, 2000). "Positive psychology revisits the 'average person' with an interest in finding out what works, what is right, and what is improving" (Sheldon & King, 2001, p.216). Drawing on positive psychology, there was the recent emergence of positive organisational behaviour (Luthans & Youssef, 2007).

2.4   Positive Organisational Behaviour

Positive organisational behaviour (POB) emerged from research which had already been conducted on positivity which focused on constructs such as job satisfaction, intrinsic motivation, self-determination and many more (Luthans, Youssef & Avolio, 2007). POB has been defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement" (Luthans, 2002, p. 59). In order for POB to be differentiated from other positive approaches within the academic literature, there was a set of criteria determined

for which constructs can be included and fall under the definition of POB (Luthans, 2002). The criteria include the following: Firstly it must be grounded in both theory and research (Luthans, 2002). Secondly it must have a valid measurement (Luthans, 2002). Thirdly it must be fairly unique to the area of organisational behaviour (Luthans, 2002). Fourthly it should not be a fixed trait but rather state-like, thus it will be open to change and development. Lastly it must have a positive influence not only on the organisation in terms of increased productivity resulting in increased profits, however it must also result in an individual's satisfaction (Luthans, 2002; Luthans et al., 2007).

Recently studies conducted by Luthans (2002) and colleagues show how constructs which meet the positive organisational behaviour criteria have been grouped together in order to form a higher order construct which they have labelled "Positive Psychological Capital" also known as PsyCap.

2.5   Psychological Capital

Psychological capital (PsyCap) is based on positive organisational behaviour, thus it is asserted that it goes beyond human capital as well as social capital (Luthans & Avolio, 2003). Therefore psychological capital is essentially who you are and not based on who you know or what you know (Adler & Kwon, 2002). PsyCap can be explained at two levels, firstly at an individual level it can be described as a resource which fuels growth as well as performance. Secondly at an organisational level, psychological capital can provide the competitive edge as well as return on investment in terms of improved employee performance (Luthans & Avolio, 2003). PsyCap is defined as "an individual's positive psychological state of development characterised by: (1) having confidence (Self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (Optimism) about succeeding now and in

the future; (3) persevering towards goals, and when necessary, redirecting paths to goals (Hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (Resiliency) to attain success" (Luthans et al., 2012, p. 254).

PsyCap can be considered a higher order construct (Luthans, 2002). This is due to the combination of positive resources an individual possesses that contribute positively toward a higher level of PsyCap (Luthans & Youssef, 2007). There are four dimensions which make up PsyCap, furthermore each of these dimensions will be unpacked further, however it is imperative to note that they cannot function in isolation from each other but we rather look at them together and specifically in this study focus on how an individual can leverage PsyCap in order to reduce occupational stress as well as increase job satisfaction (Luthans & Avolio, 2003). Empirical research revealed that studying PsyCap as a core construct can predict outcomes better than studying each of its individual components (Luthans, Avolio, Walumbwa & Li, 2005). Numerous studies have proven that individuals with greater PsyCap have a more positive perspective on life (Luthans & Avolio, 2003). Individuals who have greater PsyCap are physically healthy and have stronger immune systems; furthermore they live longer (Luthans, Youssef & Avolio, 2007). Now a discussion will ensue on the sub-constructs of PsyCap beginning with the first sub-construct of hope.

2.5.1   Hope

It is evident from positive psychology, that hope is defined in the literature as the envisaged capability to develop pathways in order to reach one's desired goals; furthermore one is capable of motivating oneself through agency thinking to use the developed pathways (Snyder, Irving & Anderson, 1991). Various authors describe hope as an emotion; furthermore they describe it

as a dispositional or alternatively a state-like process which is cognitive (Farran, Herth & Popovich, 1995). However in light of this present study the definition regarding hope is derived from Snyder et al. (1991), as it is also the definition used by POB, which defines hope as being "a positive motivational state that is based on an interactively derived sense of successful: (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)" (Snyder, Irving & Anderson, 1991, p. 287). Therefore hope as a sub-construct of PsyCap contains three well researched conceptual foundations which are agency, pathways and goals (Snyder, 2000). In addition, hope also comprises of the pathways which include not only the identification of goals as well as sub-goals, but furthermore seeking alternative ways in order to reach those particular goals (Snyder, 2000). Individuals who have high levels of hope utilise contingency planning which enables them to envision hurdles to achieving goals or sub-goals, and as a result proactively find several pathways to attain their goal (Snyder, 2000). In a school environment, teachers with hope will forecast that there will be challenges with the work they have to do, however they also have goals in mind and they have already thought of alternate ways in which to reach their goals or sub-goals should they experience challenges (Snyder, 2000).

There has been research conducted around the construct validity of hope used in conjunction with the other PsyCap sub-constructs (Carifio & Rhodes, 2002). Empirical research conducted has revealed that hope has discriminant validity as well as construct and face validity, furthermore there are positive outcomes as a result of an individual having hope (Bryant & Cvengros, 2004).

However within the organisational context there has been a limited amount of research conducted (Snyder, 2000). There has been a study conducted among Chinese workers which found hope to be positively correlated with job performance, furthermore it could be related to desirable work attitudes (Luthans, Avolio, Walumbwa & Li, 2005). Another study conducted by Peterson and Luthans (2003) found hope to be positively related to job satisfaction as well

as employee retention. Thus there is evidence of the positive effects of hope with regard to job satisfaction, job performance as well as organisational commitment (Larson & Luthans, 2006). In a South African study which was conducted by Herbert (2011), hope was said to increase an individual's ability to cope in a stressful situation. In another study conducted in South Africa by Kesari (2013, p.60) on 140 teachers' "positive PsyCap found that teachers reported work stressors such as poor organisational management, role ambiguity, job satisfaction and task stress as the main areas of concern within the educational occupational field. Thus there is a need for hope in such situations."

2.5.2 Self-Efficacy

Self-efficacy emerged from research based on the social cognitive theory which was conducted by Bandura (1997). According to Stajkovic and Luthans (1998, p.240), "self-efficacy refers to an individual's confidence in their ability to mobilise their motivation, cognitive resources and courses of action in order to achieve high levels of performance." These authors (1998, p.66) describe self-efficacy within the organisational context as "the employee's conviction or confidence about his or her abilities to mobilise the motivation, cognitive resources, or courses of action needed to successfully execute a specific task within a given context."

Bandura (1997) asserts that individuals who have a higher level of self-efficacy would also have a stronger belief in their capabilities thus enabling them to successfully address difficult challenges that arise. On the other hand individuals with low self-efficacy struggle to address those challenges as they lack a strong belief in themselves. Self-efficacy has grown in popularity among researchers due to the effects it has both psychologically as well as in terms of behaviour (Shea & Howell, 2000). Self-efficacy affects the way in which an individual thinks; furthermore it affects the actions they take based on what they think (Bandura, 1997).

It also affects the goals they set for themselves as well as the amount of commitment to those goals in terms of the amount of effort they put in and how long they persevere when they encounter challenges.

Once individuals who have self-efficacy have reached a goal, this then motivates them and also increases their confidence in their ability, therefore it allows them to persevere despite adversity, reach higher goals and develop higher levels of self-efficacy (Shea & Howell, 2000). When they encounter setbacks they recover quickly and maintain their commitment to their goals. Self-efficacy can be developed in the following ways: personal experiences of success, social modelling (which can be achieved by observing others who one considers as similar to oneself and noticing the actions they take and the consequences thereof), social persuasion (this involves receiving feedback from significant others), and an individual's physical and emotional states (Bandura, 1997; Luthans, Avey, Avolio, Norman, & Combs, 2006).

Research studies have been conducted on self-efficacy which show positive correlations with job performance (Gardner & Pierce, 1998). Previous research conducted on self-efficacy as well as performance shows that individuals who have high levels of self-efficacy adjust their goals based on their beliefs in their capabilities and as a result they put more effort into achieving their goals (Seo & Ilies, 2009). A South African study conducted by Rothmann (2003) discovered that self-efficacy as a positive psychology construct plays a mediating role with regard to occupational stress. Self-efficacy has positive correlations with job performance, job satisfaction as well as plays a mediating role with occupational stress.

2.5.3   Resilience

Resilience has been widely defined as an individual's capacity to adapt in a positive way, or regain levels of functioning once they have encountered a difficult life experience (Tugade,

Frederickson & Barrett, 2004). According to Masten and Reed (2002, p.74), resilience is defined as "a class of phenomena characterised by patterns of positive adaptation in the context of significant adversity or risk." Positive organisational behaviour defines resilience as the "positive psychological capacity to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility" (Luthans, 2002, p. 702). In more recent studies conducted by Mills, Fleck and Kozikowski (2013), resilience has been defined as "the capability to bounce back from failure and intensity." According to a study conducted by Kappagoda, Othman and De Alwis (2014, p.103), resilience is a "positive force that can be used to counter negative events in addition to extreme positive events." Thus individuals who have a high level of resilience can adapt to negative experiences. Furthermore they are better able to adapt to changes which occur within the external environment (Luthans, Vogelgesang & Lester, 2006). In order to fully understand resilience it is important to understand where research on resilience began. Resilience theory began with studies which were conducted on children who rose above difficult conditions (Garmezy, Masten & Tellegen, 1984; Masten & Best, 1990; Rutter, 1987; Werner & Smith, 2001).

Studies which were conducted in positive psychology suggest that individuals who are highly resilient have a tendency to be more effective in a number of life experiences (Contu, 2002; Masten, 2001). However there have not been many studies conducted on resilience within the organisational context (Reivich & Shatte, 2002). Resilience as a psychological resource is imperative for an individual to have as if an individual experiences repeated failures, this could then prevent them from moving forward, and furthermore they could develop a skewed view of life (Beardslee, 1989). On the other hand individuals who are resilient will search for opportunities despite challenges and setbacks and thus they will learn and move ahead (Bonanno, 2004; Mancini & Bonanno, 2006). There are three main principles of resilience which are labelled as the C's, which are: Control, Coherence and Connectedness (Enzi &

Ibrahim, 2012). It is assumed that individuals who have control, coherence as well as the element of connectedness will thrive despite the adversity they face (Enzi & Ibrahim, 2012).

There have been a few studies conducted which have attempted to link resilience to workplace performance (Coutu, 2002; Sutcliffe & Vogus, 2003; Youssef & Luthans, 2005). Resilience is a state-like construct as empirical studies conducted have revealed that resilience can be enhanced by positive emotions, moreover this can occur despite the presence of negative events (Tugade, Fredrickson & Barrett, 2004). According to Tedeschi and Calhoun (2004), resilience can lead to post-traumatic growth; this causes an individual to bounce back beyond previous levels.

Resilience as a sub-construct of PsyCap is more than just a reactive capacity. It includes a proactive dimension which promotes proactive thinking in the absence of an external threat (Richardson, 2002). It is proposed that resilience as part of PsyCap can increase job performance. This is proposed as resilient individuals are adaptable, creative as well as persistent; these characteristics result in improved performance which is invaluable in a constantly evolving work environment (Richardson, 2002).

According to Bandura (1998, p.62), "Success usually comes through renewed effort after failed attempts. It is resiliency of personal efficacy that counts." In this regard, if teachers could strive towards their goals and overcome barriers, this would then enable them to develop confidence in themselves and their work. This would then lead to the development of hope and an optimistic outlook about their work. They would then be more likely to report lower levels of occupational stress and higher levels of job satisfaction.

2.5.4 Optimism

Optimism is likened unto hope in a number of research studies, because like hope within positive psychology it has theory and research which addresses this positive construct (Luthans, 2002). Drawing from attribution theory, Seligman (1998) defines optimism as "those who make internal, stable, and global attributions regarding positive events (e.g. task accomplishment) and those who attribute external, unstable, and specific reasons for negative events (e.g. a missed deadline)." Traditionally within psychology, optimism has been conceptualised as a goal-based construct that occurs whenever an outcome has substantial value (Luthans, Avolio, Walumbwa & Li, 2005). In relation to optimism, Bandura (1998, p. 56) notes that "evidence shows that human accomplishments and positive well-being require an optimistic sense of personal efficacy to override the numerous impediments to success." In assessing the similarities and differences that exist between hope and optimism, Snyder (2002, p. 257) notes that, similar to hope, "optimism is a goal based cognitive process that operates whenever an outcome is perceived as having substantial value." Seligman (1990) asserts that not only do optimists have a reduced perception of stress but furthermore it also contributes to an individual's ability to perform well.

In research studies conducted by Seligman (1998), it was discovered that optimism, when it was directly applied within the organisational context, had a significant as well as positive relationship with performance. In addition, research studies conducted by Schulman (1999) found optimism to be directly related to work performance. A study conducted by Rothmann (2008) within the South African context found that optimism has a direct relationship to burnout and ill health; on the other hand employees with high levels of optimism were found to have low levels of burnout and ill health.

In a study by Luthans and Youssef (2004) PsyCap proposes that individuals who possess 'realistic' optimism are more likely to stay committed thus leading to higher performance. This is due to various attributional explanatory styles which are likely to be used as a way of adapting to difficult situations (Peterson, 2000). As used within this study, optimism is not just an unchecked process that lacks realistic evaluation (Schneider, 2001). Realistic optimism consists of an evaluation of what one can and cannot accomplish when facing a particular challenge and hence adds to one's efficacy and hope. According to Peterson (2000, p.20), "realistic optimism is very dynamic and changeable and therefore it is considered state-like." Thus when an optimistic individual experiences setbacks they don't see them as failures, but rather as a challenge to overcome, furthermore they seek opportunities in such situations in which they can improve and succeed (Peterson, 2000).

"In recent years, the South African basic education sector witnessed the introduction of different curriculums (such as OBE-), which is believed to have placed a significant amount of stress on teachers as they have had to adapt to the changing curricula" (Ladbrook, 2009, p. 32). Thus teachers are constantly facing challenges and therefore it is imperative for them to develop optimism as well as the hope, self-efficacy and resilience (PsyCap) in order to thrive in such situations and ultimately mediate the effects of occupational stress and also increase their level of job satisfaction.

2.5.5   Sub-Constructs of Psychological Capital

It is imperative that each of the four sub-constructs which were discussed above have conceptual independence (Bandura, 1997; Luthans & Jensen, 2002; Luthans et al., 2007; Snyder, 2002) as well as empirically based discriminant validity (Bryant & Cvengros, 2004; Carifio & Rhodes, 2002; Magaletta & Oliver, 1999). Furthermore it is proposed that there exists

a common theme which runs across all four of the sub-constructs which ties them together; this commonality is referred to as a motivational tendency to accomplish tasks and goals (Bryant & Cvengros, 2004). Therefore PsyCap is referred to as a multidimensional higher order construct.

This concept may seem fairly new, however many years ago Watson and Clark (1984, p. 465) argued, "Distinct and segregated literatures have developed around a number of personality traits that, despite different names, nevertheless inter-correlate so highly that they must be considered measures of the same construct." Each of the sub-constructs of PsyCap are important as together they help us succeed despite challenges faced in our rapidly transforming environment. Especially with regard to teachers, the development of their PsyCap resources is imperative for them to be satisfied with their occupation as well as to mediate the occupational stress they experience on a day-to-day basis. Various previous studies have found a relationship between PsyCap and occupational stress (Kun & Yu, 2016; Chuan, Lie & Quin, 2015).

2.6   Occupational Stress

2.6.1   Stress

In order to fully understand occupational stress, it is imperative to understand the complex concept of stress first. The concept of stress was first introduced by Hans Selye with regard to life science in 1936. He defined stress as 'The force, pressure, or strain exerted upon a material object or person which resists these forces and attempts to maintain its original state." Within a complex environment that is constantly evolving stress becomes a part of everyday living (Olivier & Venter, 2003). There are multiple definitions of stress as each researcher defines stress according to the context within which it is applied (Olivier & Venter, 2003). Stress is

derived from the Latin word "strictus" which translates into taut, that means stiffly strung (Olivier & Venter, 2003).

Stress defined by Hans Selye can be considered as a bodily response which is non-specific or generalised; this particular definition is situated within a physiological context (Olivier & Venter, 2003). Since stress is a part of everyday living, it is thus unavoidable. Stress can also be defined as a response to an environmental condition and as resulting from the interaction of a misfit between the environmental demands and an individual (Huberman, 1993). Kyriacou (2001, p. 28) maintains that "stress is a phenomenon that manifests in the individual person as a result of various stressors that arise from the self and the environment and affect the individual person in accordance with the way in which he or she attributes meaning to the events, stimuli or demands affecting him or her, and in accordance with the way in which he or she experiences and enters into or handles such events, stimuli or demands." Stress manifests in a number of different ways such as feelings of frustration, pressure as well as a lack of control over one's environment and emotions (Selye, 1975). According to Palsane and Lam (1996), stress results when individuals don't have the capacity and resources in order to meet the demands placed on them.

However for the purpose of this study Selye's definition of stress will be utilised as it provides us with a holistic understanding of stress as it notes that stress is caused by physiological, psychological as well as environmental demands (Selye, 1974). He defined the reaction to stress in 1936, furthermore he coined the term General Adaptive Syndrome (GAS), and this has three distinct stages.

The three stages are alarm reaction, stage of resistance and stage of exhaustion; therefore the response to a stressor follows these three stages. During the alarm reaction stage there is an

immediate psycho-physiological response at the time of the initial shock; at this time an individual's resistance to stress is lowered (Selye, 1975). At this time an individual's heart rate increases, blood pressure rises, muscles tense, furthermore there is a decrease in digestion as well as sexual responsiveness (Selye, 1975). This illustrates how the body is alerted as well as activated and at this point an individual's stress levels are at their highest (Huberman, 1993).

During the next stage of resistance the bodily response of flight or fight is engaged as an individual's body seeks to remedy the shock which was caused by the stress and to return to homeostasis of the body (Selye, 1975). However if the stressor continues then an individual's body will persevere in defending itself and thus will impede any possibility of rest and repair (Steenkamp, 2003).

Finally once the individual has reached the exhaustion phase they have formed a resistance to the continued stressor, therefore the adaption response replaces the alarm reaction phase for that particular stressor (Selye, 1975). However if an individual experiences the alarm reaction stage too intensely or too frequently over time their energy to adapt is depleted and the final stage of exhaustion collapses and they may die. It is during this stage that many individuals who lack the resources and capability to adapt experience breakdowns, their individual performance decreases and they develop illness (Huberman, 1993). Now that a thorough understanding of stress has been obtained, one can now delve into occupational stress defined within the teaching environment.

2.6.2   Understanding Occupational Stress

Occupational stress has in recent years become a popular research topic within industrial management psychology as well as occupational psychology. According to Spielberger and Rehieser (1994, p.199), they have established that "occupational stress is one of the crucial

factors affecting workers' performance and this includes teachers." Beehr and McGrath (1992) define occupational stress as "A condition arising from the interaction of people and their jobs, and characterised by changes within people that force them to deviate from their normal functioning." Occupational stress refers to the physical, mental as well as emotional wear and tear which an individual experiences within an organisation, which is brought about by the incongruence that exists between the requirements of the job and the capabilities, as well as the resources and needs the employee has and how they cope with the demands of the job (Li, Kan, Liu, Shi, Wang, Yang & Wu, 2015). Thus occupational stress is harmful both physically as well as emotionally; it occurs when an individual feels they lack the control, capability and resources in order to meet particular job demands (Olivier & Venter, 2003). Therefore it can be deduced that occupational stress is a result of the working conditions or environment of an organisation within which an employee has to work. However there is a certain amount of stress which is not harmful and increases and individual's level of productivity. This type of stress is referred to as eustress which acts as a motivating agent (Olivier & Venter, 2003). Moderate levels of stress may induce an improved effort to work, greater diligence and furthermore stimulates creativity (Schermerhorn, Hunt & Osborn, 2000). Nevertheless prolonged exposure to intense occupational stress can lead to harmful effects such as illness and breakdowns.

2.6.3 Occupational Stress in the Teaching Environment

Education is integral for the development of a country, therefore teachers are important and it is imperative that they are emotionally, physically, mentally and socially healthy (Singh, 2007). "Teacher stress has been viewed as an interactive process which occurs between teachers and their teaching environment which then leads to excessive demands being placed on them, thus

resulting in physiological as well as psychological distress" (Forlin, Douglas & Hattie, 1996, p.120). Teacher stress has been identified by researchers as an important problem (Dick & Wagner, 2001; Kyriacou, 2001). "Occupational stress is wide spread, rampant, as well as complex and has assumed great importance in work places, hence Akinboye et al. (2002, p.100) referred to it as the twentieth century disease."

Tnetteman and Punch (2005) affirmed that teachers are subjected to high levels of occupational stress regardless of the level they teach. According to Dick and Wagner (2001), teachers are more vulnerable to occupational stress as well as professional burnout than those who are in product oriented organisations. There is no doubt that stress has a negative impact on teachers but the ability to cope makes the difference among teachers (Kyriacou, 2001). Within the educational environment occupational stress affects not just the teachers; the students are also affected as well as the administrative staff and the heads of the school (Singh, 2007). In order for a teacher to teach effectively it is crucial for them to be in a positive psychological state of mind (Anbuchelvan, 2010).

The type of school a teacher works in also influences their level of stress. Shukla (2008) reported that teachers working in private and semi-government schools had higher job stress as compared to those who were working in government schools. This was attributed to the pressure they experience from the parents of the students who expect their children to perform well, and they place that responsibility on the teacher. Many teachers undergoing various stresses are only able to cope due to their personal resources while others are unable to cope with it in the school environment due to their lack of personal resources. Occupational stress is also a cause of employee turnover, job dissatisfaction as well as absenteeism. By finding ways in which to mediate the effects of occupational stress it is imperative for teachers to build up their PsyCap (Kyriacou, 2001).

In a South African study by van Zyl and Pietersen (1999), it was found that teachers experience occupational stress as a result of the fundamental changes in the country as well as the constantly changing curriculum. Teachers have to also constantly adapt to new policies as well as legislation (van Zyl & Pietersen, 1999). It is apparent in South African schools that teachers have an intense workload; they also have a large amount of admin which is required of them, this then makes it difficult for them to focus on teaching which is core to their profession. Within the South African context research indicates that teachers are faced with a number of stressors in their work environment such as role conflict, student misbehaviour, unsatisfactory working conditions, threat of redundancy, time pressure as well as inadequate salaries (Olivier & Venter, 2003; Ngidi & Sibaya, 2002). There are many sources of occupational stress within the teaching environment which will now be explored in detail.

2.6.4 Sources of Teachers' Occupational Stress

Teachers' occupational stress has been widely researched, however there are not many studies which look at how the stress they experience can be mediated (Singh, 2007). Teacher stress has been attributed to a wide variety of factors which are intrinsic to teaching such as individual vulnerability as well as systemic influences (Olivier & Venter, 2003). Most often parents place high expectations of their children on teachers, they assume that their child's performance is dependent on the teacher, however there are a range of factors which make up a child's performance and the teacher forms only one of those factors (Olivier & Venter, 2003). The environment within which teachers work also has an effect on their stress levels. Within South African schools many classrooms are overcrowded and as a result teachers have a work overload which then causes further stress (Ngidi & Sibaya, 2002).

In many schools, students lack discipline since the abolishment of corporal punishment, and this makes it difficult for teachers as they are dealing on a day–to-day basis with a variety of different students who come from different backgrounds (Saptoe, 2000). Each teacher may experience a different source of stress depending on their organisational context, structure, climate as well as their own career development as well as external factors (Olivier & Venter, 2003). Within the South African context there are numerous sources of stress, as Olivier and Venter (2003) have recognised a principal's style of management as a source of occupational stress, new governing bodies, the high crime rate, the politics of the country as well as the corruption in state departments. Another major cause of stress is teachers' lack of involvement in decision making processes. Decisions are made at a high level which affects them however they have no input into those decisions (Olivier & Venter, 2003). The type of institution within which a teacher works also affects their level of occupational stress, as a study conducted by Shukla (2008) found that private school teachers reported higher levels of occupational stress compared to public school teachers; however there is a need for a study of this nature within the South African context.

In a South African study conducted by Olivier and Venter (2003, p.187) "it was found that teachers within South Africa are faced with various stressors which include the new curriculum, changes in legislation, role conflict, unsatisfactory working conditions, learner behavioural problems, inadequate salaries as well as tight time constraints." In another South African study conducted by Ngidi and Sibiya (2002, p.8), "it was found that the abolition of corporal punishment, additional mediums of instruction and large learner-educator ratios, were seen to further contribute to higher levels of stress reported by teachers." From the above discussion it is evident that there are many sources of teachers' occupational stress, thus it is imperative to find a way in which this can be mediated, hence the call for the development of PsyCap as a positive resource to cope with occupational stress.

2.6.5   Effects of Occupational Stress on Teachers

The effects of occupational stress on teachers are numerous, however in order to develop an effective intervention to combat the effects of occupational stress it is imperative to first understand what the effects are. Occupational stress is seen as an increasingly important as well as significant occupational health problem as employees spend one-third of their lives in the organisational context (Saptoe, 2000). Thus it is imperative to address employees' mental health within the workplace, which in this instance is the school (Saptoe, 2000). The effects of occupational stress can manifest both psychologically as well as physically (Singh, 2007). However it also affects teachers' personal well-being as well as their productivity. A teacher who is stressed will have decreased job satisfaction, increased absenteeism, in some instances they may even resort to substance abuse, which in turn increases their psychological symptoms and furthermore reduces their self-esteem (Olivier & Venter, 2003).

There is no doubt that stress has a negative impact on teachers and the effects can be detrimental, however the ability to cope makes the difference among teachers. Some teachers undergoing various stresses are able to cope due to the personal resources they possess while others are unable to cope with it in the school setting as a lack of development of personal resources. Thus there is a need for the development of PsyCap as a personal positive resource to enable teachers to cope regardless of their circumstances. Since decreased job satisfaction has been a result of high occupational stress and low PsyCap, it is therefore imperative to unpack the third construct of this study which is job satisfaction. Furthermore, many studies have found a relationship between high levels of PsyCap correlating with high levels of job satisfaction (Hakkak, Zarnegarian, Ebrahimi & Heydari, 2015; Ali & Ali, 2014).

2.7   Job Satisfaction

The theoretical underpinning of job satisfaction is based on Maslow's (1954) hierarchy of needs theory, as a direct correlation between job satisfaction and a sense of fulfilment has been established by many researchers. Research studies which have been conducted propose that employees who are satisfied are more productive in the organisational environment as well as creative and furthermore they show high levels of commitment (Syptak, Marsland & Ulmer, 1999). Therefore the converse of this also proves true as teachers who are dissatisfied are less productive and furthermore this impacts negatively on the learners and in turn causes a host of problems (Castro & Martins, 2010). Thus it is imperative to address job satisfaction as it has been widely researched internationally however there are only a few studies which have been conducted within the South African context. A number of researchers have conceptualised job satisfaction as a multidimensional construct as it involves an individual's attitude toward work or certain aspects of work, furthermore it contains aspects which relate differently to other variables thus ultimately advancing the science of Industrial/Organisational Psychology (Castro & Martins, 2010). The attitude is a result of perceptions which may be cognitive, evaluative as well as affective in nature; these perceptions either elicit pleasurable or non-pleasurable feelings (Rue & Bryars, 1992). Thus job satisfaction is subjective as what one individual may perceive as pleasurable and derive satisfaction from it, another individual may find it non-pleasurable and be dissatisfied.

Spector (1997) defines job satisfaction simply as the extent to which an individual likes their job. Job satisfaction is the function of the degree to which one's needs can be satisfied and operationalised as a discrepancy between "how much is there" and "how much there should be" (Wanous & Lawler, 1972). Price (2001, p.600) has defined "job satisfaction as the affective orientation that an employee has towards his or her work", which is similar to the definition provided by Spector (1997). Job satisfaction consists of intrinsic factors (values) as well as

extrinsic factors (environment) or a combination of both extrinsic and intrinsic factors, which is then termed as general job satisfaction (Castro & Martins, 2010).

Satisfaction has been identified by researchers as crucial to organisational performance (Maghradi, 1999). Job satisfaction has been found to affect the employee as well as the organisation (Landy & Conte, 2004). According to previous research it was found that job satisfaction has an influence on other aspects of work such as turnover rates, absenteeism, productivity as well as employees' commitment and their overall well-being (Maghradi, 1999). A number of researchers have studied the level of stress among educators and have found that teachers suffer from burnout as a result of job dissatisfaction (Chaplain, 1995; Berg, 1994; Brissle, 1988). Teaching as a profession has decreased in popularity in recent years, furthermore there has been a high teacher turnover rate (Buckley, Schneider & Shang, 2005; Kotterman, 2000). This has been due to a number of teachers who are more frequently experiencing burnout as well as dissatisfaction as a result of the high demands which are placed on them (Buckley, Schneider & Shang, 2005). A South African study conducted by Naidoo et al. (2013, p.177) within a province "revealed the reasons for teachers' job dissatisfaction which include job demands, a lack of growth opportunities, job insecurity as well as a lack of control." Therefore there is a need for an intervention to be developed which increases teachers' job satisfaction, hence this study proposes the development of PsyCap as a positive coping resource.

2.8   Theoretical Framework

This present study is underpinned by two theories; the first that will be discussed is Lazarus's theory of psychological stress (1991) and thereafter self-determination theory by Deci and Ryan (2000).

2.8.1 Lazarus's Theory of Psychological Stress

Lazarus's theory of psychological stress conceptualises stress as an interaction which occurs between an individual and the environment within which they are in, furthermore the environment is crucial to an individual's well-being and also places demands upon their resources (Lazarus, 1991). In order to identify a stressor there is a two-part process which involves an appraisal. The appraisal is then divided into two types, primary and secondary, and this is then followed by a coping process (Lazarus, 1991).

 Primary appraisal can be defined as a process which an individual goes through which involves three elements, the first is goal relevance which is the extent to which an individual cares about the stressor (Lazarus, 1991). The second element is goal congruence; this involves the extent to which an individual is impacted by the stressor (Lazarus, 1991). Lastly the third element is ego-involvement; this is the extent to which they are personally committed to dealing with the stressor (Lazarus, 1991). Once the primary appraisal has been identified, the individual then progresses to secondary appraisal. At this point they try to find the potential for blame or credit and thereafter they assess their level of responsibility toward the stressor (Lazarus, 1991). Furthermore at that point the individual assesses their potential to cope with the stressor as well as whether they will be able to deal with the stressor in the future (Lazarus, 1991).

Finally the appraisal process is complete, and the individual can decide if the stressor is a harm, threat or challenge, however it is imperative to note that the decision the individual makes depends on whether they have suffered loss as a result of the stressor in the past; they may expect to suffer loss or they may even expect to master the stressor (Lazarus, 1991). Once the individual has decided if the stressor is a harm, challenge or threat, they then progress toward the coping stage (Lazarus, 1991). During the coping stage the individual makes every effort to

master, tolerate or alternatively reduce the demands of the stressor (Lazurus, 1991). Now that the theory has been unpacked it can be related to this present study with regard to teachers who experience psychological stress within the South African school context.

Within the South African school context, teachers may experience a stressor such as students who are not disciplined, and they will then go through the appraisal process. Once this process is complete they will decide whether the stressor such as undisciplined students is a harm, threat or challenge (Lazarus, 1991). Once they have decided they will then develop various strategies in order to deal with the stressor. If they decide to tolerate the stressor it would involve them working through various challenges with undisciplined students until they find the right strategy or they may eventually give up (Lazarus, 1991). Should they decide to reduce the demands of the stressor, they would then leave the teaching profession for an occupation that involves less stress.

Therefore this study is imperative as it is evident that teachers experience many different stressors within the teaching context; they need to develop resources in order to help them cope when they are faced with harm, challenges or threats. This particular theory helps one understand the process an individual, in this case a teacher, goes through when they are faced with a stressor.

In order to depict the process, Figure 1 has been provided which is a model of Lazarus's theory of psychological stress.

Figure 1:
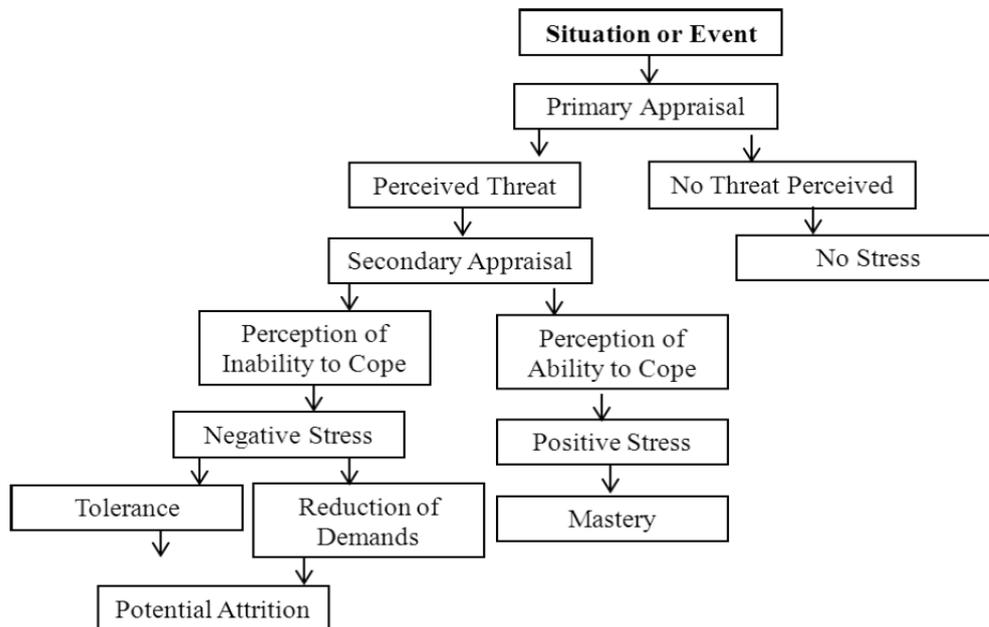
2.8.2 Self Determination Theory

According to Self Determination Theory (SDT), individuals have three basic psychological needs (Deci & Ryan, 2000). "Psychological needs are innate, human necessities that must be satisfied to ensure effective performance and well-being at work and in other life domains (e.g. family, friends, sports)" (Deci and Ryan, 2000, p.228). The three psychological needs that need to be satisfied are competence, autonomy and relatedness (Deci & Ryan, 2000). SDT posits that these three basic psychological needs have to be met in order for an individual to grow psychologically, function optimally, and ensure their optimal well-being (Deci & Ryan, 2000).

The psychological need of competence can be defined as an individual's desire to influence their environment and ultimately feel they are capable and effective and are essentially able to obtain valuable outcomes (Deci & Ryan, 2000). This psychological need for competence is satisfied when an individual understands how to achieve valued outcomes and furthermore they

are able to perform the necessary actions in order to influence their environment. Within the school environment teachers who feel they are competent believe they can master challenges they face with students, achieve the goals they set, constantly develop new skills as well as adapt to an ever changing environment within which policies and procedures are constantly changing (Olivier & Venter, 2003). The need for autonomy can be defined as the ability of an individual to initiate their own actions with freedom of choice (Deci & Ryan, 2000). However they may own actions by others if they find meaning, pleasure or interest in those particular actions. Therefore with regard to teachers, they would experience autonomy when they are able to choose their tasks or take ownership of tasks that are assigned to them (Deci & Ryan, 2000). The psychological need of relatedness can be described as a desire to feel connected to others or a community (Deci & Ryan, 2000). This need can be satisfied by an individual's secure interpersonal connections, however, these connections must be characterised by dependence, caring as well as respect. With regard to teachers, in order to satisfy their psychological need of relatedness they will need to feel connected to the principal as well as to their fellow colleagues, so they are able to share their joys and challenges (Deci & Ryan, 2000).

It is imperative to note that SDT does not focus on differences in individual's strengths, but it rather focuses on the degree to which their psychological needs are satisfied (Deci & Ryan, 2000). Therefore it is ultimately a theory of motivation, and therefore this theory relates to job satisfaction as well as psychological capital as once individuals are able to build up their personal resources, there will be a higher likelihood of their psychological needs being satisfied, which in turn would then increase their job satisfaction. Therefore there is a need for this particular study as it looks at teachers holistically in order to eventually develop an intervention which will help teachers build up their psychological capital and ultimately derive satisfaction from their job despite the occupational stress they experience on a daily basis.

2.9   Chapter Summary

This chapter began with a review of the literature. It firstly discussed the state of teaching within the South African context, then it led to a discussion on positive psychology and positive organisational behaviour which set the foundation for a discussion to ensue on PsyCap. PsyCap was then unpacked in order to gain a comprehensive understanding of the sub-constructs which are hope, self-efficacy, resilience and optimism. Thereafter occupational stress was critically discussed focusing on the sources and effects of occupational stress on teachers within the school environment. This led to a discussion of job satisfaction, as higher levels of occupational stress could ultimately result in lower levels of job satisfaction. Lastly there was a discussion of the theoretical framework on which this study is guided. The theories which were discussed included Lazarus's theory of psychological stress as it relates to occupational stress (Lazarus, 1991), and the self-determination theory by Deci and Ryan (2000), which relates to PsyCap as well as job satisfaction. Essentially this chapter provided a comprehensive review of the literature with regard to the main constructs of the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1   Introduction

This chapter aims to discuss the research methodology which was utilised in this present study. It will begin by discussing the research design of the study, thereafter it will discuss the participants who took part in the research. The sampling method that was used to select the research participants will then be discussed. Thereafter there will be a detailed discussion of the measuring instruments which are the Occupational Stress Inventory Revised (OSI-r), the Minnesota Job Satisfaction Questionnaire (MSQ), and the Psychological Capital Questionnaire (PCQ). Finally the statistical analysis is discussed and thereafter the chapter concludes with the ethical considerations of the study.

3.2   Research Methodology

3.2.1   Research Design

This is an empirical study, therefore the design used was a quantitative research design which guided the development of the aims and objectives of the study. The survey design that was used was a cross-sectional design as it provided information which was needed; furthermore it was done at one point in time (Kerlinger & Lee, 2000). The cross-sectional survey design was deemed as appropriate within occurrences where there are interrelationships among variables within a population. Furthermore there is no control or manipulation or control of variables being assessed (Kerlinger & Lee, 2000). The current research is aimed at determining the relationships that exist between variables as well as determining their predictive value.

The study also assumes a positivist approach as it seeks to identify relationships between one or more variables within this study (Neuman, 2011). A cross-sectional survey designed was utilised as it was consistent with the nature of the study as well as the objectives of the study, which was to conduct large scale research at one particular point in time in order to generate information which can be used to draw inferences from a population (Neuman, 2011). This particular design is best suited for the study as it allows for predictive and descriptive analysis.

3.2.2 Research Participants

The research participants for this study were made up of private and public teachers from 20 different schools within one region of KwaZulu-Natal in South Africa. The total population within this specific region in KwaZulu- Natal is a total of 25,036 Teachers. There were 250 participants selected by utilising the non-probability purposive sampling method. The questionnaires were given to the participants, however only 100 were returned after 2 weeks and analysed within this study. The demographic characteristics of the participants are presented in Table 1.

Results from Table 1 below show that the majority of the participants in the study (75.0%) were females with the remaining 25.0% being males. Participants had an age range of 21-68 years, with a mean age of 39.69 (SD =12.66). The majority of the participants in the study were Indians (81.0%), followed by Africans (11.0%), Whites (5.0%) and Coloureds (3.0%). Half (50%) of the participants were working in both private and public schools.

It was further observed that about 88% of the participants in the study selected English as their home language, with 11.0% and 1% of the participants having Zulu and Afrikaans as their

home language respectively. The number of years of teaching varied from 1-44 years, with average years of teaching at 16.6 years (SD =12.89). Over half (51.0%) of the participants in the study had previously attended old Model-C schools and 32% reported attending township schools. Only 11% of the participants reported having attended private schools. Finally, it was observed that approximately half (50.0%) of the participants reported been very satisfied with their progress at work and 47% indicated that they were satisfied. Age ranges = 21-68 years, Mean age = 39.69 years (SD=12.66). Years of teaching = 1-44 years, Average years of teaching = 15.61 years (SD =12.89).

3.2.3 Sampling Method

The sampling method for this particular research study was the purposive sampling method. This sampling method was utilised as it is a non-probability sampling method (Neuman, 2011). The sample for this particular study was selected using the judgement of the researcher as participants were selected in line with the purpose of the study. This particular study required private and public school teachers therefore they were selected as the research participants for the study. There was a total of 250 questionnaires given to 125 private school teachers and 125 Public school teachers. There were 50 respondents who returned the questionnaires from private schools and 50 respondents who returned the questionnaires from public schools.

3.2.4 Measuring Instruments

This study consisted of a survey which included multiple questionnaires. The first questionnaire sought to acquire demographical information from the participants. The second questionnaire included was the Psychological Capital Questionnaire (PCQ) which was

developed by Luthans, Youssef and Avolio (2007). The third questionnaire which was included was the Minnesota Satisfaction Questionnaire (MSQ) which was developed by Spector in 1997. The final questionnaire which was included was the Occupational Stress Inventory Revised (OSI-r) which was developed by Osipow and Spokone (1987). These questionnaires were included within this present study in order to understand the relationship between occupational stress, PsyCap and job satisfaction among teachers in both private and public schools.

3.2.4.1 Demographical Questionnaire

The demographic questionnaire sought to acquire demographic information from the participants involved in the study. The questions were based on sex, age, race, language, as well as a question on the type of school from which the participant had matriculated. There was also a question on the type of school they teach in (whether it was private or public) as well as the number of years they have been teaching for. Lastly there was a question asking participants to describe their progress thus far on a -point scale ranging from 'not satisfactory at all' to 'very satisfactory.'

3.2.4.2 Psychological Capital Questionnaire (PCQ)

PCQ seeks to measure the positive resource of PsyCap (Luthans, Youssef & Avolio, 2007). The PCQ consists of 24 items and was utilised in order to assess the constructs of PsyCap of the participants. The PCQ consists of a 4-point Likert scale ranging from 1 (strongly disagree); 2 (disagree); 3 (somewhat disagree); 4 (somewhat agree); 5 (agree) and 6 (strongly agree) (Luthans, Youssef & Avolio, 2007). This scale was used to rate the items within the questionnaire. In order to determine the level of positive PsyCap within the participants, the score, which was a result of the responses they had given, was used. The four sub-constructs

(hope, self-efficacy, resilience and optimism) of PsyCap in the PCQ are measured using well established scales. An example of one of the items within the PCQ is "I feel comfortable helping to set goals/targets in my work area." Participants would then have to rate this item based on a scale from 1(strongly disagree) to 6 (strongly agree).

The use of the PCQ can be found in a number of research studies (Luthans, Youssef & Avolio, 2007). The full PCQ has a Cronbach alpha which is = 0.91 (Luthans, Youssef & Avolio, 2007). The PCQ has been applied in multicultural settings and its use within the South African context has significance since many studies have used this questionnaire. A recent research study done by Pillay (2012) within the South African context found a Cronbach alpha of 0.88. Simons and Buitendach (2013) found a Cronbach alpha of 0.91. Therefore, this scale was designated for use in the present study since its applicability with regard to reliability and validity has been well established (Pallant, 2010).

3.2.4.3 Minnesota Satisfaction Questionnaire (MSQ)

The MSQ was developed by Spector in 1997. The MSQ is frequently used in many research studies as a measure of job satisfaction (Buitendach & Rothmann, 2009). This present study will utilise the short form of the MSQ which consists of 20 items (Spector, 1997). This questionnaire has a response format of a 5-point Likert scale which ranges from 'very satisfied' to 'very dissatisfied' (Spector, 1997). The Cronbach alpha of the questionnaire is reported to be 0.96 within a South African context (Rothmann, Scholtz, Fourie & Rothmann, 2002).

The MSQ comprises of both intrinsic and extrinsic constituents of job satisfaction. In a research study by Buitendach and Rothmann (2009), the Cronbach alpha for the intrinsic scale within the MSQ was reported to be 0.79 and for the extrinsic scale it was reported to be 0.82; thus proving to be a valid and reliable measure of job satisfaction in the South African organisational

context. An example of an item within the MSQ is: How satisfied am I with this aspect of my job - "Being able to keep busy all the time"? Participants would then rate this on a 5-point scale from 'very satisfied' to 'very dissatisfied.' This particular questionnaire was used in this study as it is relevant within a multicultural context, thus it is relevant within the South African context.

3.2.4.4 Occupational Stress Inventory (Revised) (OSI-r)

The OSI-r consists of 167 items (Osipow & Spokone, 1987). The questionnaire comprises of a 6-point Likert scale type of response for all the items and produces 25 sub-scales which are then divided into six areas. The six areas are explained below.

Firstly how you feel about your job assesses job satisfaction with 22 items and a response scale ranging from very much satisfaction to very much dissatisfaction (Osipow & Spokone, 1987). It consists of five sub-scales: achievement, value and growth; the job itself; organisational design and structure; organisational processes; and personal relationships (Osipow & Spokone, 1987).

Secondly it seeks to measure how you assess your current state of health in two parts (Osipow & Spokone, 1987). Part A is an 18-item response scale which ranges from 'very true' to 'very untrue'; this is a measure of mental ill-health, and part B is a 12-item measure of physical ill-health which consists of a response scale ranging from 'never' to 'very frequently experience the particular symptom' (Osipow & Spokone, 1987).

Thirdly the way you behave generally is a type A behaviour pattern measure which consists of 14 items ranging from 'very strongly agree' to 'very strongly disagree' (Osipow & Spokone, 1987). Within this measure there are three sub-scales: attitude to living, style of behavior, and ambition.

The fourth area focuses on how you interpret events around you, and therefore it is a measure of workplace locus of control (Osipow & Spokone, 1987). It consists of 12 items ranging from 'very strongly agree' to 'very strongly disagree' (Osipow & Spokone, 1987). Furthermore the measure consists of three sub-scales: organisational forces, management processes, as well as individual influence.

The fifth area focuses on sources of pressure in your job (Osipow & Spokone, 1987). It consists of 61 items ranging on a scale from 'very definitely is' to 'very definitely is not a source' (Osipow & Spokone, 1987). Six sub-scales assess sources of pressure: factors intrinsic to the job, managerial role, relationships with others, career and achievement, organisational structure and climate, as well as home-work interface (Osipow & Spokone, 1987).

Lastly the sixth area focuses on how you cope with the stress you experience (Osipow & Spokone, 1987). It consists of 28 coping items ranging from 'never' to 'very extensively.' There are six sub-scales within this measure that assess the following coping strategies: social support, task strategies, logic, home-work relationships, time management, as well as involvement (Osipow & Spokone, 1987). Cronbach's alpha for the subscale coefficients ranged from 0.72 to 0.86 (Ryan, 1996).

This particular questionnaire was included due to its reliability and validity in previous studies as noted above. Therefore one can assume that the OSI-r is an adequate measure of occupational stress, furthermore it has been used within the South African context thus it has multicultural relevance and applicability.

3.2.5   Research Procedure

The questionnaires were administrated to both public and private teachers during working hours. Firstly gatekeeper permission was acquired within each school, thereafter the teachers

who had agreed to participate were given two weeks within which they had to complete the questionnaire. The researcher went to each class and gave out the questionnaires to the teachers who agreed to participate. All participants received the same instructions and the same period of time within which they had to complete the questionnaire which was 2 weeks.

The participants were also assured anonymity and confidentiality. The participants were asked to return the questionnaires once they had completed them to the gatekeeper for collection by the researcher. After two weeks the questionnaires were collected from the gatekeeper at each school. There was 50 questionnaires collected from Public schools and 50 collected from Private schools. Confidentiality was maintained throughout the research as the data is locked in a vault within the School of Applied Human Sciences in the Humanities Department.

Furthermore to ensure confidentiality access to the vault is restricted to only the researcher and the supervisor at the University of KwaZulu-Natal. After five years the data will be destroyed by shredding all the questionnaires that were administered and completed as part of the study. Furthermore, no names or personal details were recorded when the data was entered into the statistical computer programme (SPSS), furthermore only the researcher had access to this computer (IBM SPSS Inc., 2012). The participants were assigned numbers for identification purposes. This was to ensure that participant anonymity was upheld. After five years all computer evidence will be erased and purged.

3.2.5   Statistical Analysis

Data was analysed using the Statistical Package for Social Sciences (SPPS) version 23. The data was originally entered in Microsoft Excel and then exported into SPSS. Continuous variables were summarised using the mean and standard deviation. Categorical data was represented using frequency tables. The Cronbach alpha coefficients (α) were used to examine

the internal consistencies of key measures used in the current study. The Pearson product moment correlation co-efficient was used to examine the relationship between job satisfaction, PsyCap and occupational stress. To examine the best predictors of job satisfaction, standard multiple regression analysis was used. Finally the Independent Sample t-test and One-Way ANOVA were used to explore possible effects of demographic characteristics (age and gender) on PsyCap. All analysis was conducted at two-tailed and with a p-value of less than 0.05, which is considered to be statistically significant.

3.2.5   Ethical Considerations

The issue of ethical considerations was an important aspect within this research study and it followed the ethical guidelines as set out by the University of KwaZulu-Natal Ethics Committee. Firstly there was an application made to the Ethics Committee at the University of KwaZulu-Natal and permission was granted to go ahead with this research study (see Appendix 1). Secondly there was an application made to the Department of Education in order to acquire permission to conduct the research study with teachers in both private and public schools; the application then went through a process and permission was granted to conduct the study in both private and public schools (see Appendix 6).

Thereafter at each school there was a meeting held with the principal in order to receive gatekeeper permission to give the questionnaires to the teachers. Finally the teachers were consulted in order to determine if they would like to be a part of the study as it was done on a voluntary basis. The research objectives were clearly outlined to each of the participants involved and they were made aware that the information they have provided would be kept confidential and anonymity would be maintained as their identity would not be disclosed; and furthermore the information they provided would not affect them negatively in any way.

Thereafter they were asked to sign an informed consent form which also contained a brief description of the study (see Appendix 1).

3.3   Chapter Summary

This chapter began by providing an introduction to the research methodology of the study. Then there was a discussion on the research design of the study. The quantitative research paradigm was utilised for this study; specifically the cross-sectional survey design was discussed as it guided the processes of the study. Thereafter there was a discussion on the research participants of the study and information regarding the participants' demographics. Thereafter there was a discussion on the sampling method of the study which was the purposive non-probability sampling method as it was consistent with the aims and objectives of the study. Thereafter the measuring instruments of the study were discussed;, firstly the demographic questionnaire was discussed, followed by the Psychological Capital Questionnaire, the Minnesota Satisfaction Questionnaire and lastly the Occupational Stress Inventory Revised Questionnaire.. The statistical analysis of the study was then discussed and finally it was imperative to discuss the ethical considerations of the study.

CHAPTER 4

RESULTS

4.1   Introduction

This chapter presents the results of the study. The first section of the results describes the demographic characteristics of the participants. This is followed by examining the relationships among the study variables and determining the predictors of both intrinsic and extrinsic job satisfaction. This chapter is concluded by looking at possible differences in occupational stress, job satisfaction and psychological capital (PsyCap) between private and public school teachers.

4.2 Demographic Profile of the Participants

Results from Table 1 below show that the majority of the participants in the study (75.0%) were females with the remaining 25.0% being males. This is consistent with previous research as the majority of teachers are females as they tend to lean towards teaching more than their male counterparts. Participants had an age range of 21-68 years, with a mean age of 39.69 (SD =12.66). The majority of the participants in the study were Indians (81.0%), followed by Africans (11.0%), Whites (5.0%) and Coloureds (3.0%). Half (50%) of the participants were each working in either private or public schools.

It was further observed that about 88% of the participants in the study selected English as their home language, with 11.0% and 1% of the participants selecting Zulu and Afrikaans as their home language respectively. The number of years of teaching varied from 1-44 years, with the average years of teaching been 16.6 years (SD =12.89). Over half (51.0%) of the participants

in the study had previously attended old Model-C schools and 32% reported attending township schools. Only 11% of the participants reported having attended private schools. Finally, it was observed that approximately half (50.0%) of the participants reported being very satisfied with their progress at work and 47% indicated that they were satisfied.

Table 1: *Demographic characteristics of the participants in the study*

Characteristics	Frequency	Percentage (%)
Gender		
Male	25	25.0
Female	75	75.0
Race		
African	11	11.0
White	5	5.0
Indian	81	81.0
Coloured	3	3.0
Home language		
English	88	88.0
Zulu	11	11.0
Afrikaans	1	1.0
Previous school attended		
Rural School	5	5.0
Township school	32	32.0
Old model-C school	51	51.0
Missionary School	1	1.0
Private school	11	11.0
Where employed		
Private	50	50.0
Public	50	50.0
Progress		
Not satisfactory at all	1	1.0
Somewhat satisfactory	2	2.0
Satisfactory	47	47.0
Very satisfactory	50	50.0

4.3   Table 2: *Descriptive Statistics and Cronbach Alpha Coefficients*

Variables	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis	α
Total_PsyCap	61	135	103.73	17.77	-0.44	-0.73	0.932
Self_Efficacy	14	36	27.06	5.12	-0.28	-0.62	0.879
Hope	14	36	27.12	5.86	-0.34	-0.86	0.937
Optimism	13	35	25.78	4.76	-0.60	-0.02	0.717
Resilience	12	35	23.77	4.73	-0.26	-0.22	0.653
Total_Satisfaction	33	97	70.55	15.12	-0.31	-0.89	0.940
Intrinsic_MSQ	18	60	44.52	9.04	-0.37	-0.44	0.907
Extrinsic_MSQ	7	29	19.21	5.41	-0.35	-0.65	0.873
General_MSQ	2	10	6.82	2.07	-0.22	-0.75	0.731
Role_Overload	18	48	32.66	6.80	0.29	-0.63	0.780
Role_Insufficiency	19	44	31.08	5.38	-0.21	-0.50	0.608
Role_Ambiguity	20	46	34.94	6.41	-0.52	-0.60	0.768
Role_Boundary	10	46	27.45	5.93	0.37	0.59	0.670
Responsibility	15	49	29.12	6.99	0.54	0.39	0.769
Personal_Env	10	45	21.92	8.47	0.74	-0.10	0.880

The descriptive statistics as well as the Cronbach alpha coefficients are provided in Table 2 above. Furthermore presented within the table are the minimum and maximum values of the scores, the mean, standard deviation, skewness and kurtosis as well as the Cronbach alpha coefficients for each of the measures which were used in this study. According to Pallant (2011), an acceptable statistical range for skewness is -2 to 2. He also asserts that the acceptable range for kurtosis falls between -7 to 7. Since this data set found in Table 2 above falls within the acceptable range it has acceptable normality. Therefore as a result the data is acceptable for analysis.

Table 2 also indicates that the majority of the variables (PsyCap, all the sub-constructs of PsyCap and job satisfaction) are negatively skewed, indicating that the scores for these variables cluster at the high end of the graph which therefore indicates high scores. From a review of the Cronbach alpha coefficients, all the scales used (PCQ, ORQ, MSQ) are reliable since the values are above 0.70 which is the acceptable reliability figure according to statistical guidelines by Pallant (2011). The reliability coefficient for PsyCap was 0.93, job satisfaction was 0.88 and the ORQ within the OSI-r was 0.78. The next section discusses if there is a gender difference with regard to PsyCap.

Table 3: *Gender differences in Psychological capital*

Variable	Male (N=25)		Female (N=75)		*t* – value
	Mean	*SD*	*Mean*	*SD*	
Psychological capital	100.48	19.89	104.81	17.00	1.06

4.4 Gender differences in Psychological capital

An independent t-test was also used to test whether there is any gender difference in the PsyCap of school teachers. The result as shown in Table 3 above revealed that female teachers (*M* = 104.81, *SD* = 17.005) have slightly higher values on PsyCap than the male counterparts (*M* = 23.58, *SD* = 7.75). This difference was however, not strong enough to yield any statistical significance [*t* (98) = 1.06, *p* > 0.05]. In the next section the relationship between PsyCap, job satisfaction and occupational stress is discussed in relation to the analysis conducted.

Table 4: *Summary of the intercorrelations of the study variables*

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Self-efficacy	1	------	------	------	------	------	------	------	------	------	------	------	------
2.	Hope	0.67*** ++	1	------	------	------	------	------	------	------	------	------	------	------
3.	Optimism	0.62*** ++	0.72*** ++	1	------	------	------	------	------	------	------	------	------	------
4.	Resilience	0.55*** ++	0.69*** ++	0.78*** ++	1	------	------	------	------	------	------	------	------	------
5.	Intrinsic MSQ	0.54*** ++	0.59*** ++	0.50*** +	0.46*** +	1	------	------	------	------	------	------	------	------
6.	Extrinsic MSQ	0.34*** +	0.49*** +	0.35*** +	0.39*** +	0.74*** ++	1	------	------	------	------	------	------	------
7.	Total PsyCap	0.82*** ++	0.90*** ++	0.89*** ++	0.86*** ++	0.61*** ++	0.46*** +	1	------	------	------	------	------	------
8.	Total MSQ	0.49*** +	0.58*** ++	0.47*** +	0.45*** +	0.95*** ++	0.92*** ++	0.58*** ++	1	------	------	------	------	------
9	Role overload	0.11	-0.01	0.08	0.04	-0.09	-0.35***	-0.24*	0.06	1	------	------	------	------
10	Role insufficiency	0.33** +	0.30** +	0.27**	0.31** +	0.49*** +	0.39** +	0.35*** +	0.47*** +	0.28** +	1	------	------	------
11	Role ambiguity	0.33** +	0.35*** +	0.23*	0.13	0.35*** +	0.20*	0.31** +	0.29**	0.26**	0.54*** +	1	------	------
12	Role boundary	-0.11	-0.24*	-0.17	-0.17	-0.08	-0.15	-0.20*	-0.13	0.45*** +	0.22*	0.16	1	------
13	Responsibility	0.07	-0.09	0.05	0.06	0.13	0.03	0.02	0.09	0.36*** +	0.26**	0.13	0.53*** ++	1
14	Physical environment	-0.23*	-0.40***	-0.29**	-0.08	-0.26**	-0.30**	-0.30**	-0.30**	0.22*	-0.05	0.30**	0.46*** +	0.33** +

Note. MSQ = Minnesota Satisfaction Questionnaire; *SD* = Standard Deviation; PsyCap = Psychological Capital

***p < .001, two-tailed

+r > 0.30- Practically significant (medium effect)

++r > 0.50- Practically significant (large effect)

4.5   Relationship between Psychological Capital, Job Satisfaction and Occupational Stress

The Pearson-moment correlation coefficient (r) was conducted to examine the relationship between PsyCap, job satisfaction and occupational stress. Table 3 shows moderate to strong correlation coefficients among these variables. A significant positive relationship existed between self-efficacy and both intrinsic satisfaction ($r = 0.54$; $p < 0.001$; large effect) and extrinsic job satisfaction ($r = 0.34$; $p < 0.001$; medium effect). Hope was also positively related to intrinsic satisfaction ($r = 0.59$; $p < 0.001$; large effect) and extrinsic job satisfaction ($r = 0.49$; $p < 0.001$; medium effect). Optimism showed a positive significant relationship with intrinsic satisfaction ($r = 0.50$; $p < 0.001$; medium effect) and extrinsic job satisfaction ($r = 0.35$; $p < 0.001$). Finally, resilience also showed a positive and significant relationship with intrinsic satisfaction ($r = 0.46$; $p < 0.001$; medium effect) and extrinsic job satisfaction ($r = 0.39$; $p < 0.001$; medium effect). These results thus suggest that higher scores on the sub-scales of PsyCap leads to corresponding higher scores on both intrinsic and extrinsic job satisfaction. The findings also showed a positive significant relationship between intrinsic job satisfaction and extrinsic job satisfaction ($r = 0.78$; $p < 0.001$; large effect).

Total PsyCap showed a positive and significant relationship for total job satisfaction ($r = 0.58$; $p < 0.001$; large effect), with intrinsic satisfaction ($r = 0.61$; $p < 0.001$; large effect) and extrinsic job satisfaction ($r = 0.46$; $p < 0.001$; medium effect). These results thus suggest that higher scores on PsyCap lead to corresponding higher scores on total job satisfaction, intrinsic and extrinsic job satisfaction. The findings also showed a positive significant relationship between intrinsic job satisfaction and extrinsic job satisfaction ($r = 0.78$; $p < 0.001$; large effect).

It can also be observed that all the sub-scales of PsyCap were significantly related to total job satisfaction, indicating that as the scores of self-efficacy, hope, optimism and resilience increase, there would be a corresponding increase in total job satisfaction.

With regards to occupational stress, role overload was negatively and significantly associated with only extrinsic job satisfaction ($r = $ -0.35; $p < 0.001$) and total job satisfaction ($r = $ -0.24; $p < 0.001$). Role insufficiency on the other hand was positively associated with total PsyCap ($r = 0.35$; $p < 0.001$; medium effect) and its sub-scales: self-efficacy ($r = 0.33$; $p < 0.01$; medium effect); hope ($r = 0.30$; $p < 0.01$); optimism ($r = 0.27$; $p < 0.01$) and resilience ($r = 0.31$; $p < 0.01$; medium effect). Role insufficiency was positively associated with total job satisfaction ($r = 0.74$; $p < 0.001$; large effect), intrinsic job satisfaction ($r = 0.49$; $p < 0.001$; medium effect) and extrinsic job satisfaction ($r = 0.39$; $p < 0.001$; medium effect). The same trend was observed for role ambiguity which was positively and significantly associated with total job satisfaction, intrinsic and extrinsic job satisfaction as well PsyCap and its sub-scales, except for resilience. Role boundary was negatively associated with only total PsyCap ($r = $ -0.20; $p < 0.05$) and hope ($r = $ -0.24; $p < 0.05$).

It was also observed that personal environment was negatively associated with total PsyCap ($r = $ -0.30; $p < 0.01$) and its sub-scales: self-efficacy ($r = $ -0.23; $p < 0.001$); hope ($r = $ -0.40; $p < 0.001$); optimism ($r = $ -0.29; $p < 0.001$), but not with resilience ($r = $ -0.08; $p > 0.05$). Personal environment was negatively associated with job satisfaction ($r = $ -0.30; $p < 0.01$), intrinsic job satisfaction ($r = $ -26; $p < 0.01$) and extrinsic job satisfaction ($r = $ -0.30; $p < 0.01$). The next section looks at the best predictors of intrinsic and extrinsic job satisfaction.

Table 5: *Summary of Multiple Regression of the best predictors of intrinsic and extrinsic job satisfaction*

Models	Predictors	B	SE B	β	t	p-values	R²	F	Tolerance
							Collinearity Statistics		
1. Intrinsic-MSQ	Constant	13.40	4.43		3.03**	0.003			
	Self-efficacy	0.42	0.19	0.24	2.11*	0.037			0.514
	Hope	0.57	0.20	0.37	2.82**	0.006	0.389	15.14***	0.375
	Optimism	0.12	0.27	0.07	0.46	0.649			0.315
	Resilience	0.05	0.26	0.03	0.20	0.843			0.360
2. Extrinsic-MSQ	Constant	6.14	2.94		2.08*	0.040			
	Self-efficacy	0.04	0.13	0.04	0.29	0.772			0.514
	Hope	0.39	0.13	0.43	2.29**	0.004	0.246	7.75***	0.375
	Optimism	-0.10	0.18	-0.09	-0.56	0.567			0.315
	Resilience	0.17	0.17	0.15	1.01	0.314			0.360
3. Total MSQ	Constant	19.60	7.39		2.65**	0.009	0.333	48.94***	0.950
	Psychological Capital	0.49	0.07	0.58	6.99***	0.000			

Note: MSQ = Minnesota Satisfaction Questionnaire; *B* = Unstandardised coefficient *B*; *SE B* = Standard error of *B*; β = Standardised coefficients beta.

*$p < .05$; **$p < .01$; ***$p < .0$

4.6   Predictors of Intrinsic and Extrinsic Job Satisfaction

To determine the predictors of both intrinsic and extrinsic job satisfaction, two regression models were conducted using only predictors/independent variables that had significant relationship with the criterion variable in Table 5. In Model 1, the results showed a significant joint influence of the sub-scales of PsyCap on intrinsic job satisfaction (R^2 = 0.389, F = 15.14; $p < .001$). The results indicated that 38.9% of the variance in intrinsic job satisfaction was explained by the predictors. The results further indicated that only self-efficacy and hope made significant contribution to the regression model. Hope (β = .37; t = 2.82; $p < 0.01$) was found to be the best predictor of intrinsic job satisfaction followed by self-efficacy (β = .24; t = 2.11; $p < 0.05$). These findings suggest that school teachers in this study who reported higher levels of hope and self-efficacy had higher intrinsic job satisfaction, as summarily expressed in Table 4 above.

The second model showed a significant joint effect of self-efficacy, hope, optimism and resilience on extrinsic job satisfaction (R^2 = 0.246, F = 7.75; $p < .001$), and explained 24.6% of the variance in extrinsic job satisfaction. Further analysis revealed that out of the four sub-scales of PsyCap, only hope (β = .43; t = 2.29; $p < 0.01$) was found to be the best predictor of extrinsic job satisfaction of school teachers. This result suggests that participants who reported higher scores on hope were more likely to exhibit extrinsic job satisfaction.

The third linear regression model and second model showed a significant amount of total PsyCap on total job satisfaction (R^2 = 0.333, F = 48.94; $p < .001$), and explained 33.3% of the variance in total job satisfaction. This result indicates that participants who reported higher scores on total PsyCap were more likely to exhibit higher scores in job satisfaction.

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Table 6: *Means and standard deviations of occupational stress, job satisfaction and psychological capital for private and public school teachers*

Variable	Private teachers (N=50)		Public teachers (N=50)		t – value	p – value
	Mean	*SD*	*Mean*	*SD*		
Occupational Stress						
Role overload	29.80	5.64	35.52	6.70	5.72***	0.000
Role insufficiency	31.80	5.03	30.36	5.67	1.40	0.182
Role ambiguity	35.88	5.98	34.00	6.74	1.80	0.143
Role boundary	27.12	6.07	27.78	5.83	0.66	0.580
Responsibility	29.62	8.00	28.62	5.86	1.10	0.477
Physical environment	20.26	8.91	23.58	7.75	3.32*	0.050
Job Satisfaction						
Total Satisfaction	79.96	13.03	64.14	14.43	4.66***	0.000
Intrinsic MSQ	47.68	8.59	41.36	8.42	3.72***	0.000
Extrinsic MSQ	21.64	3.98	16.78	5.59	5.01***	0.000
Psychological Capital	107.08	16.23	100.38	18.74	1.91	0.059

*$p < .05$; **$p < .001$

4.7 Differences in Occupational Stress, Job Satisfaction and Psychological Capital according to the Type of Teachers

The independent t-test was used to examine differences between private and public school teachers on the various indicators of occupational stress. The results as shown in Table 6 reveal that differences were observed in role overload and physical environment. Public teachers ($M = 35.52$, $SD = 6.70$) scored higher values on role overload than private teachers ($M = 29.80$, $SD = 5.64$). This difference was found to be statistically significant [t (98) $= 5.72$, p < 0.00]. Physical environment was significantly higher in public teachers ($M = 23.58$, $SD = 7.75$) than private teachers ($M = 20.26$, $SD = 8.91$), [t (98) $= 3.32$, $p < 0.05$]. The results however did not reveal any difference in role insufficiency, role ambiguity, role boundary and responsibility among both private and public teachers.

The results as shown in Table 5 also revealed differences among public and private teachers on job satisfaction. Specifically, private teachers ($M = 79.96$, $SD = 13.03$) scored higher values on total job satisfaction than public teachers ($M = 64.14$, $SD = 14.43$). This difference was found to be statistically significant [t (98) $= 4.66$, $p < 0.001$]. The same trend was observed for intrinsic and extrinsic job satisfaction. Private teachers ($M = 47.68$, $SD = 8.59$) obtained significantly higher scores on intrinsic job satisfaction than public teachers ($M = 41.36$, $SD = 8.42$), [t (98) $= 3.32$, $p < 0.001$]. It was also observed that private teachers ($M = 21.84$, $SD = 3.98$) obtained significantly higher scores on intrinsic job satisfaction that public teachers ($M = 16.78$, $SD = 5.59$), [t (98) $= 5.01$, $p < 0.001$]. Private teachers ($M = 107.08$, $SD = 16.23$) have higher values on PsyCap than public teachers ($M = 100.38$, $SD = 18.74$). This difference was however, not strong enough to yield any statistical significance [t (98) $= 1.91$, $p = 0.059$].

4.8   Chapter Summary

This chapter began by discussing the demographic characteristics of the participants. The results were then presented regarding the gender difference in PsyCap. Thereafter it presented the results of the relationship between PsyCap, job satisfaction and occupational stress. The chapter then explored the data in order to find the best predictors of intrinsic and extrinsic job satisfaction and the results were presented. Finally the results of the difference in PsyCap, job satisfaction and occupational stress among private and public school teachers were presented.

CHAPTER 5

DISCUSSION OF RESULTS

5.1 Introduction

The aim of this chapter is to firstly discuss the results of the study as the previous chapter presented the results of the analysis of the study. The findings from this particular research study are integrated with previous similar research studies. This chapter draws on the theoretical considerations of the study namely the self-determination theory by Deci and Ryan (1991) as well as Lazarus' theory of psychological stress (1991). These particular theories are used in order to discuss the results of PsyCap, job satisfaction and occupational stress.

5.2 Discussion of Results

The main objective of this study was to investigate the relationship between occupational stress, PsyCap and job satisfaction among public and private school teachers in one region within KwaZulu-Natal in South Africa. The specific objectives were to firstly explore the psychometric properties of the data collected, then to determine the relationship between PsyCap, occupational stress and job satisfaction. The third objective was the comparison between the levels of occupational stress, job satisfaction and PsyCap between private and public school teachers. The fourth objective was to investigate the best predictors of intrinsic and extrinsic job satisfaction. Finally the last objective was to investigate the role of the demographic factor of gender on PsyCap.

5.2.1 Reliability

The measuring instruments which were used in this study as well as its sub-scales have been found to have high internal consistencies. The reliability estimates for the variables were determined using the Cronbach alpha coefficients (α); all except the sub-scales resilience, role insufficiency and role boundary were found to have a Cronbach alpha coefficient below the acceptable guideline of $\alpha \geq 0.70$ as proposed by Pallant (2011).

A high reliability level was established for the total PCQ; the Cronbach alpha was reported to be 0.93 which is slightly higher compared to the findings by Luthans, Youssef et al. (2007) as in that particular study there was a Cronbach alpha coefficient of 0.92. In another study, Simons and Buitendach (2013) reported a Cronbach alpha coefficient of 0.91. The total MSQ has a Cronbach alpha coefficient of 0.94 indicating that it possesses high reliability. The result obtained in this study is similar to a South African study which found the Cronbach alpha of the MSQ to be 0.96 (Rothmann, Scholtz, Fourie & Rothmann, 2002). For the OSI-r the subscales Cronbach alpha ranged from 0.61 to 0.80. This result is similar to a study conducted by Ryan (1996), where the Cronbach alpha for the sub-scale coefficients ranged from 0.72 to 0.86. The next section that follows looks at gender differences in PsyCap.

5.2.2 The Relationship between Psychological Capital, Occupational Stress and Job Satisfaction

To determine the relationship between PsyCap including the sub-scales of hope, self-efficacy, resilience and optimism, job satisfaction, including intrinsic and extrinsic satisfaction, and occupational stress, including sub-scales of role overload, role insufficiency, role ambiguity, role boundary, and responsibility as well as the physical environment. These variables were analysed

using the Pearson product-moment correlation coefficient (*r*). There was a moderate to strong relationship determined from the results. Furthermore the results indicated a significant positive relationship between self-efficacy, hope, resilience and optimism, which are sub-scales of PsyCap, with both intrinsic job satisfaction as well as extrinsic job satisfaction. These results suggest that higher levels of the sub-scales of PsyCap lead to corresponding higher levels of intrinsic and extrinsic job satisfaction. A study conducted by Luthans (2007) found a similar result to this present study as there was a significant positive relationship between the sub-scales of PsyCap and job satisfaction.

This result relates to the self-determination theory by Deci and Ryan (2000), as they assert when individuals build up their personal resources in this study it has been conceptualised as PsyCap. It then increases the likelihood of them being satisfied and in this instance this theory has been proven consistent as higher levels of PsyCap correlates with higher levels of job satisfaction. It can also be observed from the results that all the sub-scales of PsyCap were significantly related to total job satisfaction, indicating that as the scores of self-efficacy, hope, optimism and resilience increase, there would be a corresponding increase in total job satisfaction. Furthermore the results of this study indicate a positive relationship between extrinsic and intrinsic job satisfaction. A South African study conducted by Buitendach and Rothmann (2009) indicated a similar result.

The sub-scales of occupational stress (role overload, role boundary and personal environment) were negatively associated with total PsyCap, intrinsic and extrinsic job satisfaction; this insinuates that the higher the occupational stress the lower the job satisfaction and PsyCap levels.

This is consistent with Lazarus's theory of psychological stress (1999), as higher levels of stress lead to potential attrition, and in this instance, lower job satisfaction.

5.2.3 Levels of Occupational Stress and Job Satisfaction between teachers from the private and public schools

The independent t-test was used to examine differences between private and public school teachers on the various indicators of occupational stress. The results reveal that differences were observed in role overload and physical environment. Public teachers scored higher values on role overload than private teachers. This difference was found to be statistically significant. Results on physical environment were significantly higher for public teachers than private teachers. The results however did not reveal any difference in role insufficiency, role ambiguity, role boundary and responsibility among both private and public teachers.

The results also revealed differences among public and private teachers on job satisfaction. Specifically, private teachers scored higher values on total job satisfaction than public teachers. This difference was found to be statistically significant. The same trend was observed for intrinsic and extrinsic job satisfaction. Private teachers have higher values on PsyCap than public teachers.

These results are indicative of the need for interventions which are aimed at educating teachers on developing their PsyCap, and this would then lead to a reduction in occupational stress as well as an increase in job satisfaction. Research studies which have been conducted propose that employees who are satisfied are more productive and creative in the organisational environment, and furthermore they show high levels of commitment (Syptak, Marsland & Ulmer, 1999). It is

imperative to note that from the available literature which has been examined there is no current research within the South African context which investigates the difference in PsyCap levels, occupational stress and job satisfaction among private and public school teachers.

5.2.4 Multiple Regression of the Best Predictors of Intrinsic and Extrinsic Job Satisfaction

There were three regression models which were conducted in order to determine the best predictors of intrinsic and extrinsic job satisfaction. Research studies which have been conducted propose that employees who are satisfied are more productive and creative in the organisational environment, and furthermore they show high levels of commitment (Syptak, Marsland & Ulmer, 1999). A South African study conducted by Naidoo et al. (2013) within a province, revealed the reasons for teachers' job dissatisfaction which include job demands, a lack of growth opportunities, job insecurity as well as a lack of control.

The first regression model indicated that hope was the best predictor of intrinsic job satisfaction; this was then followed by self-efficacy. These findings suggest that school teachers within the study who reported higher levels of hope and self-efficacy had higher intrinsic job satisfaction. The second model showed a significant joint effect of self-efficacy, hope, optimism and resilience on extrinsic job satisfaction. Further analysis revealed that out of the four sub-scales of PsyCap, only hope was found to be the best predictor of extrinsic job satisfaction of school teachers. This result suggests that teachers who reported higher scores on hope were more likely to exhibit extrinsic job satisfaction.

The third linear regression model and second model showed a significant amount of total PsyCap on total job satisfaction. As a result total PsyCap predicted total job satisfaction better than its individual sub-scales. This result indicates that participants who reported higher scores on total PsyCap were more likely to exhibit higher scores in job satisfaction.

The results within this study are consistent with that of Luthans et al. (2007) as they found that each of the four constructs, as a linear model that form the core construct of PsyCap, predicted job satisfaction; moreover their study also found that the linear model of all four of the individual factors predict job satisfaction better than the factors individually, as can be seen in this study. Next the results of the gender differences in Psychological Capital will be discussed.

5.2.5   The role of Gender on Psychological Capital

An independent t-test was also used to test whether there is any gender difference in the PsyCap of school teachers. The results revealed that female teachers have slightly higher values of PsyCap than their male counterparts. This difference was however not strong enough to yield any statistical significance.

This indicated that gender does not play a role in determining one's level of PsyCap. The nature of the teachers' work possibly affects both males and females equally based on the same external conditions at work. The self-determination theory suggests that individuals require feeling that their social conditions are acceptable in order for their innate tendencies towards vitality to be enacted. Since these conditions impact both males and females equally this could then potentially result in the equal enactment of their PsyCap levels. PsyCap is then considered as an antecedent

to these innate tendencies of vitality as well as satisfaction (Deci & Ryan, 2000). The findings of this present study are contrary to those found by Lehoczky (2013), who reported that males have a significantly lower level of PsyCap than their female counterparts. An examination of the literature revealed that there has not been a statistical significant difference found in previous studies within the South African context.

5.3   Chapter Summary

This chapter began with revisiting the objectives of the study, which was then followed by a discussion of the results of the analysis conducted on the variables within the study. This particular chapter drew on previous scientific research as well as theoretical considerations which related to the variables within this study. Finally the last chapter discusses the conclusions of the study, the limitations as well as recommendations.

CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1   Introduction

The previous chapter discussed the results of the study. The aim of this chapter is to discuss the conclusions of this present study in relation to the objectives which were set out at the beginning of the study. Thereafter the limitations of this study will be discussed and finally there is a discussion on the recommendations for teachers within private and public schools as well as recommendations for future research studies.

6.2   Conclusions

6.2.1   Reliability of the Measuring Instruments

The internal consistency for all the measuring instruments used was high as was observed from the Cronbach alphas and descriptive statistics, furthermore the sub-scales of the measuring instruments also had high internal consistency. Therefore the measuring instruments which were used within this present study were suitable due to their high level of reliability as well as consistency.

6.2.2   The Role of Gender on Psychological Capital

This particular analysis yielded a difference between male and female teachers indicating that female teachers had a higher level of psychological capital (PsyCap) than their male counterparts, however this result was not strong enough to yield any statistical significance.

6.2.3   The Relationship between Psychological Capital, Occupational Stress and Job Satisfaction

The research question for this particular objective was to find if there was a relationship between PsyCap, occupational stress and job satisfaction. The results of this study revealed that there is a significant positive relationship between PsyCap and job satisfaction and furthermore there is a negative relationship between occupational stress and job satisfaction.

The conclusions drawn from this study are consistent with that of Buitendach and Rothmann (2009), who also found a similar result. It can also be observed that all the sub-scales of PsyCap were significantly related to total job satisfaction, indicating that as the scores of self-efficacy, hope, optimism and resilience increase, there would be a corresponding increase in total job satisfaction.

Therefore it can be concluded that higher levels of PsyCap is associated with higher levels of job satisfaction with regards to teachers. Furthermore higher levels of occupational stress are associated with lower levels of job satisfaction, therefore there is a need for PsyCap to act as a

buffer against the occupational stress that both public and private teachers experience on a daily basis.

6.2.4   The Best Predictors of Job Satisfaction

Satisfaction has been identified by researchers as crucial to organisational performance (Maghradi, 1999). Job satisfaction has been found to affect the employee as well as the organisation (Landy & Conte, 2004). Therefore there was a need to look at the sub-scales of PsyCap and find the best predictors of intrinsic and extrinsic job satisfaction.

According to previous research it was found that job satisfaction has an influence on many aspects of work such as turnover rates, absenteeism, productivity as well as employees' commitment and their overall well-being (Maghradi, 1999). Therefore job satisfaction is important with regards to teachers. The analysis of this present study indicated that hope was the best predictor of intrinsic job satisfaction; this was then followed by self-efficacy. It can be concluded from this study that school teachers who reported higher levels of hope and self-efficacy had higher intrinsic job satisfaction.

There was also a significant joint effect of self-efficacy, hope, optimism and resilience on extrinsic job satisfaction. Further analysis revealed that out of the four sub-scales of PsyCap, only hope was found to be the best predictor of extrinsic job satisfaction of school teachers. It can be concluded from the results that teachers who reported higher scores on hope were more likely to exhibit extrinsic job satisfaction.

Finally there was a significant amount of total PsyCap on total job satisfaction. As a result total PsyCap predicted total job satisfaction better than its individual sub-scales. This result indicates

that participants who reported higher scores on total PsyCap were more likely to exhibit higher scores in job satisfaction. The results within this study are consistent with that of Luthans et al. (2007) as they found that each of the four constructs, as a linear model that form the core construct of PsyCap, predicted job satisfaction

6.2.5 The different level of Occupational Stress, Job Satisfaction and Psychological Capital of Public School Teachers and Private School Teachers

There is limited literature available on the comparison of public and private school teachers specifically focusing on PsyCap, job satisfaction and occupational stress. However the analysis of the results revealed that on the sub-scale of role overload within occupational stress, public teachers scored higher than private teachers indicating that private school teachers may have a higher role overload than public school teachers; furthermore this result was significant. For the sub-scale of physical environment within occupational stress, public teachers scored higher than private teachers indicating that the physical environment in public schools is a greater source of stress for public teachers than private teachers.

The results also revealed differences among public and private teachers on job satisfaction. Specifically, private teachers scored higher values on total job satisfaction than public teachers. This difference was found to be statistically significant, therefore it can be concluded that private teachers have a higher level of job satisfaction than public teachers. The same trend was observed for intrinsic and extrinsic job satisfaction.

Finally it was observed that public school teachers had a higher level of PsyCap than private school teachers, therefore it can be concluded that there is a need for the development of interventions to build PsyCap of teachers in both private and public schools so they are able to be more effective.

This would then increase their levels of job satisfaction as well as reduce their levels of occupational stress as they would possess the internal resources to cope with daily stressors in their physical environment.

6.3   Limitations

As within every study there are limitations and this study is no exception. Firstly the study was conducted in one region within KwaZulu-Natal. This was a small area and therefore the results cannot be generalised to the entire population. Secondly the measuring instruments used were self-reporting measures; this is a limiting factor as the teachers could have given socially desirable responses. There was also a poor response rate as teachers were extremely busy and many did not answer the questionnaires; 200 were given and only 110 returned. This study utilised a cross-sectional design therefore causality among the variables cannot be determined.

Although this study had a few limitations it produced valuable results which contribute to past research and also provide the impetus for future research. The results produced can be used for the development of interventions which can be implemented within the South African school environment.

6.4   Recommendations for the Schools

The recommendations for schools are specific to this particular research study and the results thereof. The results of the research indicated that higher levels of PsyCap are positively correlated with higher levels of job satisfaction however it is negatively correlated with sub-scales of occupational stress.

Therefore it is recommended that this present study be used as a starting point, however in addition to this there is a need for an as-is assessment of the school environment as well as teachers' workload and the stress they experience. Thereafter there is a need for the design of an intervention to address the finding of the as-is assessment and ultimately help teachers increase their level of PsyCap so they are able to cope with stress and derive satisfaction from their job. Once the intervention is implemented it is recommended that a sustainability plan should be put in place together with champion teachers in each school, who will take responsibility for keeping the momentum going and making the change sustainable. Furthermore throughout this process there is a need for change management which will yield tangible results with regards to teachers being motivated and being more productive within the school environment. This process would need to be carried out by external consultants who have the right capabilities as well as experience in this particular area. This particular research study could be used as an impetus to motivate government to fund this specific intervention which should translate to a range of exercises such as workshops, skills development, as well as interventions on stress management.

6.5   Recommendations for Future Research

This present study has contributed to scientific research however there are recommendations for future research studies on occupational stress, PsyCap and job satisfaction. Firstly it is recommended that a larger sample be used which will ensure greater generalisability across the population. As seen from the results of this research study, there is a need for more research in this area. Future research should also be conducted using longitudinal research in order to get a better understanding of causal relationships between PsyCap, job satisfaction and occupational stress.

6.6   Chapter Summary

This chapter concludes this research study. Within this chapter all the research questions and objectives have been answered and attained. The limitations of the study were presented as well as recommendations for schools and recommendations for future research.

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Appendix 1: Informed Consent Sheet

<u>**Occupational Stress, Psychological Capital and Job Satisfaction among Private and Public School Teachers in One Region within KwaZulu-Natal.**</u>

Dear Participant

I am conducting research as part of my Psychology Master's degree. Thank you for showing interest in participating in my research project. There are four main objectives of this study. Firstly to determine if there is a significant difference between private and public school teachers with regard to psychological capital, occupational stress and job satisfaction using the Occupational Stress Inventory, the Minnesota Job Satisfaction questionnaire as well as the Psychological Capital questionnaire. Secondly to determine the relationship between psychological capital and job satisfaction. Thirdly to determine the relationship between psychological capital and occupational stress and lastly to examine the effect of occupational stress on job satisfaction. Furthermore it aims to produce meaningful results. The nature of the research is to add to the existing information on occupational stress, job satisfaction as well as psychological capital within which is hope, self-efficacy, optimism and resilience.

The questionnaire will take approximately one hour of your time. Your participation in answering this questionnaire is entirely <u>voluntary</u> and if at any time you choose to opt out of the research you may do so. If you choose not to participate it will not affect you in any way. While there is no direct benefit involved if your participation this may benefit teachers in the future who have issues with occupational stress, job satisfaction and coping. If at any time you feel any emotional discomfort or harm you may contact me in order for you to be referred to a psychologist in the psychological clinic at Howard College. Participants will not be asked to provide their name and all information you provide will be kept <u>confidential and anonymous</u>. To maintain confidentiality, you will be assigned numbers for the purposes of identification, and no names or personal information will be requested. The results will be stored safely in a vault and after five years the assessment questionnaires will be destroyed by means of shredding. No monetary or material compensation will be provided to for participating, there is very little anticipated risk as the area of research does not delve into any deeply personal or traumatic experiences. The researcher will, however, be available to discuss any issues or concerns that you may have as they arise.

For any further information please feel free to contact the researcher or supervisor of the study Professor Joey Buitendach. If you have any queries about the rights of research respondents please contact Ms. Phumelele Ximba in the Humanities and Social Science Research Ethics Office.

<u>**Contact Details:**</u>

Professor Joey Buitendach	**Ms.PhumeleleXimba**	**Miss Nicole Pillay**
Supervisor	**Ethics Officer**	**Researcher**
Tel: 031- 266 2648	**Tel: 031-2603587**	**Cell: 0846360321**

Kind regards,
<u>Nicole Pillay</u>

CONSENT DOCUMENT FOR PARTICIPANTS

I have been informed about the nature, purpose and procedures for the study on Occupational Stress, Psychological Capital and Job Satisfaction among Private and Public School Teachers in One Region within KwaZulu-Natal. I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent to take part in the study.

I understand that I am at liberty to withdraw from the project at any time, should I so desire and that the information that I provide will be anonymous and confidential and will only be used for research purposes.

Participant:

_____

Signature   Date

Witness/ Research Assistant:

_____

Signature   Date

Appendix 2: Research Instrument

BIOGRAPHICAL QUESTIONS

Please mark with an X

1. Sex

Male	1
Female	2

2. How old are you? (in years)

3. How would you describe yourself?

African	1	White	4
Coloured	2	Other (Please Specify) _____	5
Asian/Indian	3		

4. What is your home language?

Tswana	1	Pedi	7
Sotho	2	Tsonga	8
Zulu	3	Venda	9
Xhosa	4	English	10
Siswati	5	Afrikaans	11
Ndebele	6	Other (Please Specify)	12

5. How would you describe the school from which you matriculated?

Rural school	1
Township school	2
Old Model C-school (mixed race)	3
Missionary school	4
Private school	5

6. Do you teach in a private or public school? _____

7. How long have you been teaching for? _____

8. How would you describe your progress thus far? Please cross the appropriate box

Not satisfactory at all	Somewhat satisfactory	Satisfactory	Very Satisfactory

Appendix 3: Minnesota Satisfaction Questionnaire

Please rate the extent to which you feel (dis)satisfied with the following statements by crossing the appropriate number on the 1-5 point scale. **1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, 5 = very satisfied**.

	1	2	3	4	5
1. Being able to keep busy all the time.	1	2	3	4	5
2. The chance to work alone on the job.	1	2	3	4	5
3. The chance to do different things from time to time.	1	2	3	4	5
4. The chance to be 'somebody' in the community.	1	2	3	4	5
5. The way my boss handles his/her workers.	1	2	3	4	5
6. The competence of my supervisors in making decisions.	1	2	3	4	5
7. Being able to do things that don't go against my conscience.	1	2	3	4	5
8. The way my job provides for steady employment.	1	2	3	4	5
9. The chance to do things for other people.	1	2	3	4	5
10. The chance to tell people what to do.	1	2	3	4	5
11. The chance to do something that makes use of my abilities.	1	2	3	4	5
12. The way company policies are put into practice.	1	2	3	4	5
13. My pay and the amount of work I do.	1	2	3	4	5
14. The chances for advancement on this job.	1	2	3	4	5
15. The freedom to use my own judgement.	1	2	3	4	5
16. The chance to try my own methods of doing the job.	1	2	3	4	5
17. The working conditions.	1	2	3	4	5
18. The way my co-workers get along with each other.	1	2	3	4	5
19. The praise I get for doing a good job.	1	2	3	4	5
20. The feeling of accomplishment I get from my job.	1	2	3	4	5

Appendix 4: Psychological Capital Questionnaire

Below are statements that describe how you may think about yourself right now. Use the following scales to indicate your level of agreement or disagreement with each statement.(**1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree**).

1. I feel confident analysing a long-term problem to find a solution.	1	2	3	4	5	6
2. I feel confident in representing my work area in meetings with management.	1	2	3	4	5	6
3. I feel confident contributing to discussions about the company's strategy.	1	2	3	4	5	6
4. I feel confident helping to set targets/goals in my work area.	1	2	3	4	5	6
5. I feel confident contacting people outside the company (e.g. suppliers, customers) to discuss problems.	1	2	3	4	5	6
6. I feel confident presenting information to a group of colleagues.	1	2	3	4	5	6
7. If I should find myself in a jam at work, I could think of many ways to get out of it.	1	2	3	4	5	6
8. At the present time, I am energetically pursuing my work goals.	1	2	3	4	5	6
9. There are lots of ways around any problem.	1	2	3	4	5	6
10. Right now I see myself as being pretty successful at work.	1	2	3	4	5	6
11. I can think of many ways to reach my current work goals.	1	2	3	4	5	6
12. At this time, I am meeting the work goals that I have set for myself.	1	2	3	4	5	6
13. When I have a setback at work, I have trouble recovering from it and moving on.	1	2	3	4	5	6
14. I usually manage difficulties one way or another at work.	1	2	3	4	5	6
15. I can be "on my own," so to speak, at work if I have to.	1	2	3	4	5	6
16. I usually take stressful things at work in my stride.	1	2	3	4	5	6
17. I can get through difficult times at work because I've experienced difficulty before.	1	2	3	4	5	6
18. I feel I can handle many things at a time in this job.	1	2	3	4	5	6
19. When things are uncertain for me at work, I usually expect the best.	1	2	3	4	5	6
20. If something can go wrong for me work-wise, it will.	1	2	3	4	5	6
21. I always look on the bright side of things regarding my job.	1	2	3	4	5	6
22. I'm optimistic about what will happen to me in the future as it pertains to work.	1	2	3	4	5	6
23. In this job, things never work out the way I want them to.	1	2	3	4	5	6
24. I approach this job as if "every cloud has a silver lining".	1	2	3	4	5	6

Appendix 5: Occupational Stress Inventory (OSI-r)

1. At work I am expected to do too many different tasks in too little time.	1	2	3	4	5
2. I feel that my job responsibilities are increasing.	1	2	3	4	5
3. I am expected to perform tasks in my job for which I have never been trained.	1	2	3	4	5
4. I have to take work home with me.	1	2	3	4	5
5. I have the resources I need to get my job done.	1	2	3	4	5
6. I'm good at my job.	1	2	3	4	5
7. I work under tight time deadlines.	1	2	3	4	5
8. I wish that I had more help to deal with the demands placed upon me at work.	1	2	3	4	5
9. My job requires me to work in several equally important areas at once.	1	2	3	4	5
10. I am expected to do more than is reasonable.	1	2	3	4	5
11. My career is progressing as I hoped it would.	1	2	3	4	5
12. My job fits my skills and interests.	1	2	3	4	5
13. I am bored with my job.	1	2	3	4	5
14. I feel I have enough responsibility in my job.	1	2	3	4	5
15. My talents are being used in my job.	1	2	3	4	5
16. My job has a good future.	1	2	3	4	5
17. I am able to satisfy my needs for success and recognition in my job.	1	2	3	4	5
18. I feel overqualified for my job.	1	2	3	4	5
19. I learn new skills in my work.	1	2	3	4	5
20. I have to perform tasks that are beneath my ability.	1	2	3	4	5
21. My supervisor provides me with useful feedback about my performance.	1	2	3	4	5
22. It is clear to me what I have to do to get ahead.	1	2	3	4	5
23. I am uncertain about what I am supposed to accomplish in my work.	1	2	3	4	5
24. When faced with several tasks I know which should be done first.	1	2	3	4	5
25. I know where to begin a new project when it is assigned to me.	1	2	3	4	5
26. My supervisor asks for one thing, but really wants another.	1	2	3	4	5
27. I understand what is acceptable personal behaviour in my job (e.g. dress, interpersonal relations, etc.)	1	2	3	4	5
28. The priorities of my job are clear to me.	1	2	3	4	5
29. I have a clear understanding of how my boss wants me to spend my time.	1	2	3	4	5
30. I know the basis on which I am evaluated.	1	2	3	4	5
31. I feel conflict between what my employer expects me to do and what I think is right or proper.	1	2	3	4	5
32. I feel caught between factions at work.	1	2	3	4	5
33. I have more than one person telling me what to do.	1	2	3	4	5
34. I know where I fit in my organisation.	1	2	3	4	5
35. I feel good about the work I do.	1	2	3	4	5

36. My supervisors have conflicting ideas about what I should be doing.	1	2	3	4	5
37. My job requires working with individuals from several departments or work areas.	1	2	3	4	5
38. It is clear who really runs things where I work.	1	2	3	4	5
39. I have divided loyalties in my job.	1	2	3	4	5
40. I frequently disagree with individuals from other work units or departments.	1	2	3	4	5
41. I deal with more people during the day than I prefer.	1	2	3	4	5
42. I spend time concerned with the problems others at work bring to me.	1	2	3	4	5
43. I am responsible for the welfare of subordinates.	1	2	3	4	5
44. People on-the-job look to me for leadership.	1	2	3	4	5
45. I have on-the-job responsibility for the activities of others.	1	2	3	4	5
46. I worry about whether the people who work for/with me will get things done properly.	1	2	3	4	5
47. My job requires me to make important decisions.	1	2	3	4	5
48. If I make a mistake in my work, the consequences for others can be pretty bad.	1	2	3	4	5
49. I worry about meeting my job responsibilities.	1	2	3	4	5
50. I like the people I work with.	1	2	3	4	5
51. In my job I am exposed to high levels of noise.	1	2	3	4	5
52. In my job I am exposed to high levels of wetness.	1	2	3	4	5
53. In my job I am exposed to high levels of dust.	1	2	3	4	5
54. In my job I am exposed to temperature extremes.	1	2	3	4	5
55. In my job I am exposed to bright light.	1	2	3	4	5
56. My job is physically dangerous.	1	2	3	4	5
57. I have an erratic work schedule.	1	2	3	4	5
58. I work all by myself.	1	2	3	4	5
59. In my job I am exposed to unpleasant odors.	1	2	3	4	5
60. In my job I am exposed to poisonous substances.	1	2	3	4	5